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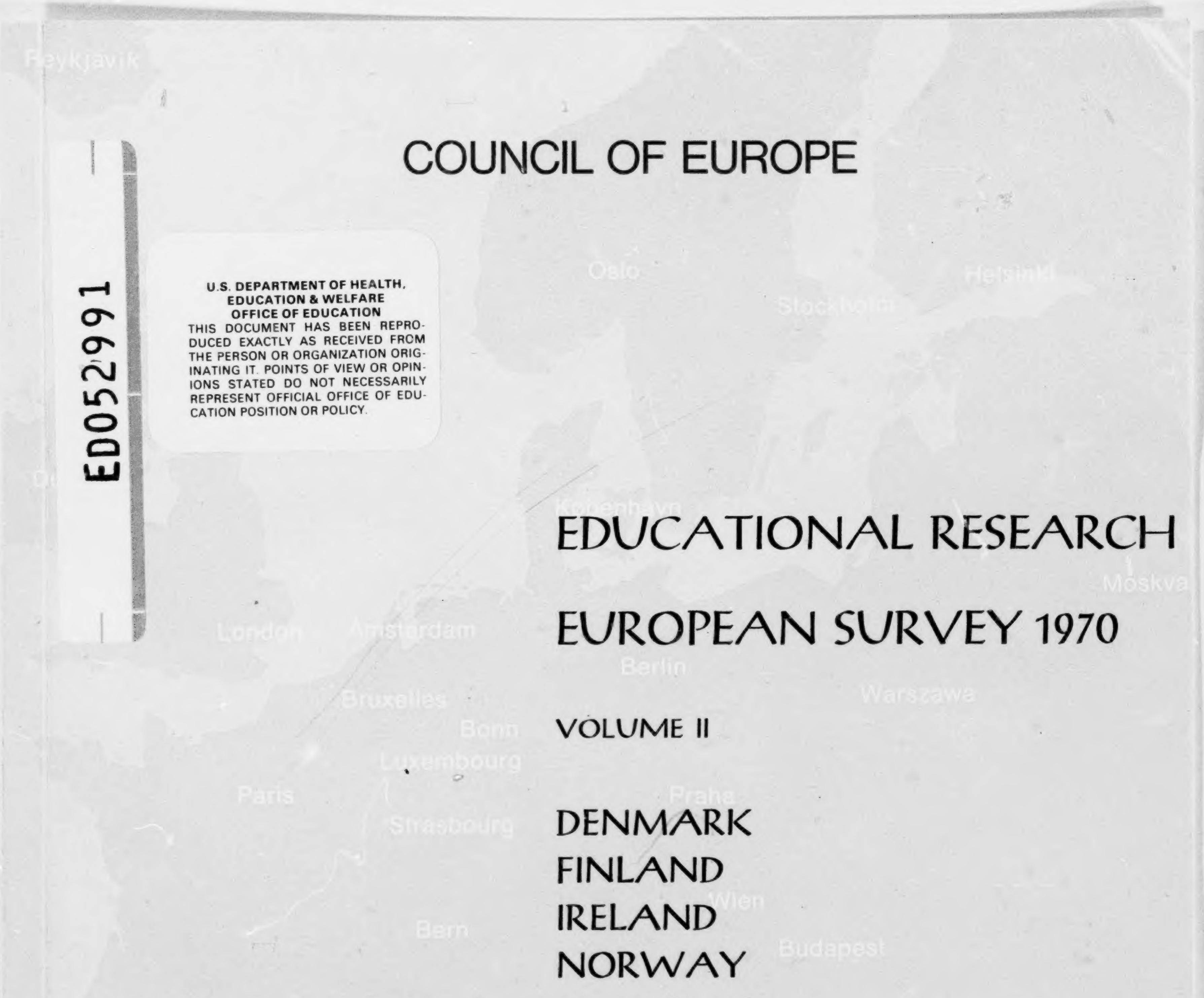
ABSTRACT

Volume 2 of the second biannual survey of educational research in member states of the Council of Europe compiles survey replies from Denmark, Finland, Ireland, and Norway. The survey provides detailed yet concise information on the educational research policies of these governments relative to major educational research projects reported or in progress in the country. The report from each country is divided into two parts: (1) activities of educational research organizations, and (2) activities of organizations not primarily concerned with educational research. Details given for each research project include: name of researcher, duration of study, method, and procedures. Some reports include conclusions and references. (RS)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EDUCATIONAL RESEARCH

EUROPEAN SURVEY 1970

VOLUME II

DENMARK
FINLAND
IRELAND
NORWAY

SE 012 136

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EUROPEAN SURVEY 1970

Volume II

DENMARK
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DOCUMENTATION CENTRE FOR EDUCATION IN EUROPE

Editor:
Director of Education
and of Cultural and Scientific Affairs
Council of Europe
STRASBOURG
1971

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INTRODUCTION

The Council of Europe's ad hoc Committee for Educational Research, which was set up by the Council for Cultural Co-operation in 1968, has the task of promoting information on, co-ordination of, and co-operation in educational research at the European level.

Under the guidance of the Committee, the Documentation Centre for Education in Europe carries out and publishes European Surveys on Educational Research at two-year intervals. The First Survey was conducted in 1968 and published in 1969 (Council of Europe.- Educational Research, European Survey 1968.- Strasbourg, Documentation Centre for Education in Europe, 4 Vols., 1969). The Second Survey, carried out in 1970, is now presented.

The Surveys contain the replies received from member Governments of the Council for Cultural Co-operation to questionnaires drawn up by the Committee. The objective of the Surveys is to serve as an instrument for mutual information of Governments and researchers. The Surveys are intended to provide detailed yet concise information on the educational research policy of member Governments, on the main educational research organisations and on the major educational research projects reported or in progress in the country in the respective time period.

The questionnaire which underlies the Second Survey is basically identical to the questionnaire of the First Survey. This should facilitate comparison. However, in the questionnaire of the 1970 Survey, a section was added which asked for information on educational research projects carried out by research organisations other than those primarily concerned with educational research. Furthermore, in the light of experience gained from the First Survey, a number of questions were reformulated. The redrafting of the questionnaire was done by a working party which was set up at the 1969 meeting of the Committee and comprised experts from France, the Federal Republic of Germany, the Netherlands, Sweden and the United Kingdom.

The national contributions to the 1970 Survey have tended to be more comprehensive than those received in 1968. In some member States the number of educational research projects and of research organisations has considerably increased. The growing impact of research on educational practice and, at the same time, the difficulties engendered by accelerated educational growth, have led many member Governments to refine their policies for planning, co-ordinating and financing educational research. The Second Survey is therefore even more voluminous than the First. This certainly raises the question of how this method of collating and distributing information on educational research at the European level might be improved in future - a problem which is on the Committee's agenda for its 1971 annual meeting.

To speed up the process of publication, contributions have been offset printed in several volumes in the order and in the language in which they were received. Following the Committee's advice, no attempt was made to translate the manuscripts into the other official language. This would at present have posed insurmountable difficulties to the Secretariat. An Index Volume, listing the names of the researchers mentioned in the Survey and containing key words for the retrieval of the projects described in English and French respectively, will be published at the end of the series.

The technical editing which in some cases involved a certain amount of linguistic revision, had, as previously, to be done by the Secretariat in addition to its normal duties. Any misinterpretation that may have arisen will, it is hoped, be met with indulgence.

The Secretariat is glad to report that some member Governments have used their contributions to this Survey as the basis for a national publication and that in a number of member States the procedure of replying to the questionnaire has led to the creation of permanent machinery for collating and disseminating educational research information. It can also be proved that the Surveys have assisted educational research organisations and individual researchers in establishing contacts and engaging in co-operation. The Secretariat hopes that the Surveys will make an impact on educational policy in Europe by convincing decision-makers that there is a growing pool of research potential at their disposal, in their own country and abroad, which can contribute to the formulation and solution of those problems to which research can offer an answer.

Niels BORCH-JACOBSEN
Director of Education and of
Cultural and Scientific Affairs

Strasbourg
March 1971

I. EDUCATIONAL RESEARCH POLICY

Stimulation, co-ordination and finance

A.1 Pedagogical and educational research falls within the fields of research covered by the *Research Council for the Humanities* which was established in 1968 to advise the Ministry of Education in this field and to initiate, co-ordinate and support such research.

The *Danish Advisory Science Council* established in 1965 is responsible for the co-ordination of all scientific research activities including, as the case may be, educational research projects.

The *Danish Institute for Educational Research* was established in 1958 with the object of stimulating all educational research activities. The Institute which is directly responsible to the Ministry of Education carries out research related to education and is also responsible for assisting, planning and co-ordinating educational experiments outside the Institute and for analysing the results derived from them.

The *Board of Experimentation of the Public Primary and Lower Secondary Schools (Folkeskolen)* was established in 1969 to act as an advisory body to the Directorate of the Public Primary and Lower Secondary Schools and the Teacher Training Colleges under the Ministry of Education.

The Board submits to the Directorate for approval recommendations on proposals for educational experimentation compatible with the educational aims of the *Folkeskole*. The Board further submits recommendation on State aid for the carrying out of such proposals. The Board gives its opinion on such proposals for experimental educational arrangements submitted to it by the Directorate, that are within the purview of the general provisions of the law. It supervises approved experimental teaching and is responsible for the publication of its results.

The Board may further take independent initiative in launching educational experimentation within the *Folkeskole*.

The Board of Experimentation of the Public Primary and Lower Secondary School has its own secretariat. At present its staff consists of two advisory officers.

Ministerial committees charged with responsibility for taking initiatives in innovation, eg change of curricula, and for advising the Ministry on new structures within the different fields of education may become instrumental in promoting research activities. This is especially the case as far as the *Planning Board for Higher Education* is concerned, which to a certain degree acts as a liaison organ between the administrative authorities and research in general.

A.2 Up to now neither the Advisory Science Council nor the Research Council for the Humanities have taken up their functions in the field of educational research. The *Planning Board for Higher Education* has been responsible for co-ordinating and planning research within its field of activity during this period.

A.3 Educational Research is *financed* partly by separate provision in the ministerial budget including that for the institutions mentioned under II, and partly by funds administered by the Research Councils.

A.4 Figures covering total expenditure on educational research are not available because most research activities are carried out by universities and other institutions of higher education in connection with their activities and are consequently not specified in the budget.

The following special accounts for educational research are available:

Board of Experimentation of Public Primary and Lower Secondary Schools, 0.5 mill. d.kr.

Danish Institute for Educational Research, 2.2 mill. d.kr.

Priority fields

B.1 The following priority fields can be listed:

Reform of structures and curricula within higher education.

Technical and commercial education, especially as regards the establishment of new structures of education and training in preparation for a radical reform to replace apprenticeship training.

Lower secondary school: structure and curriculum development aiming at establishing a unified, comprehensive school covering the first to tenth forms.

Upper secondary school: curriculum development aiming at diversification and individualisation.

Computerised education and training in EDP in all fields of education.

Reform of teaching methods at all levels.

B.2 Special committees have been set up in the fields mentioned to carry out experimentation and to initiate research where appropriate.

B.3 Experimentation is carried out in most fields by central as well as by regional authorities and by interested schools, but research activities have only to a certain extent been influenced by administrative decisions regarding priority fields of innovation and development.

Information

C.1 The *Danish Institute for Educational Research* and the *State Library of Pedagogics* both publish annual reports and lists of literature including articles on research activities and provide general information on educational research matters of interest to teachers.

The latter is also responsible for keeping the regional school centres informed about educational research and educational innovations and developments.

So far no central recurrent register of research activities has been established but such register is to be established in 1971.

C.2 The Ministry is represented on the Planning Board for Higher Education by the senior administrators and is thus kept informed on research in this field. The Ministry is also represented on the Board of Experimentation of Public Primary and Lower Secondary Schools.

The Danish Institute for Educational Research, being under the authority of the Ministry of Education, informs it through reports and surveys on current educational research projects and their results. This is also the case for the Danish National Institute of Social Research.

In most other fields of educational research the information received by the Ministry may be regarded as informal.

C.3 The *Schools Centres* are, *inter alia*, responsible for disseminating the results of research to the teachers.

II. ACTIVITIES OF EDUCATIONAL RESEARCH ORGANISATIONS

Replies were received from the following organisations:

1. The Danish School of Educational Studies
2. The Danish Institute for Educational Research
3. The State Institute for Training of Vocational Teachers
4. Institute for Studies in Higher Education, University of Copenhagen

Name of organisation: DANMARKS LAERERHÖJSKOLE
(The Danish School of Educational Studies)

Address: Emdrupvej 101, 2400 Copenhagen NV

Director: Professor Harald Torpe, Rector

A. HISTORICAL

The Danish School of Educational Studies dates back to 1856, at which time further education of teachers in primary schools was established on the initiative of the Minister for Ecclesiastical Affairs and Public Instruction. During the following hundred years an institution, which became the centre of all further education of primary school teachers, grew up. Since 1958 its development towards a school of education at the higher education level was promoted through appointment of a number of professors and finally its status as an institution of higher education was confirmed by Act of 25 February 1963.

B. ORGANISATION AND PROGRAMMES

1. Independent institution.

2. No directing, governing or advisory board.

3. The following divisions, sections,units, etc exist: Departments of general psychology, developmental psychology, education and educational psychology, didactics and methodology (sections for special education and for school librarians), religious knowledge, Danish language and literature, English, German, French and Latin, history, history of the Danish school, singing and music, mathematics, physics, chemistry, biology, geography, nutrition and biochemistry.

The main institution is located in Copenhagen, and seven branches are placed in larger provincial cities.

Research, however, is carried out in the main institution in Copenhagen.

4. The School of Educational Studies is charged with further training of teachers. (Further training in gymnastics and woodwork takes place at other special institutions.)

The activities can roughly be divided into the following categories:

- One year courses (2 semester courses = 10 months).
- Shorter courses taking place during the school year.
- Correspondence courses.
- Summer holiday courses.
- Graduate studies organised as three-year full-time studies (convertible - according to specified rules - to part-time studies over a longer period). The studies lead to the graduate examination in education.
- Psychological-educational field of study.
- Educational field of study, and
- Special educational field of study for practising teachers (a combination of the study of a school subject and the study of psychology and education, including teaching problems in the subject chosen).

5. Present staff

The academic staff consists of 127 persons, including 7 part-time staff members, occupied with research and teaching. 13 staff members are mainly working in the field of research.

6. Total budget

1968-69	20.5 million d.kr.
1969-70	25.3 million d.kr.
1970-71	29.5 million d.kr.

So far the predominant part of the budget has been devoted to the extensive teaching activities of the School. But research is taking a growing part of the resources.

The institution is financed from governmental funds.

7. Main fields of research activities:

The research activities going on are both theoretical and practical, the main fields being the transformation of results of scientific-professional research so that they can be used in educational situations at different levels. Teachers who have passed the graduate examination are considered qualified for educational research.

C/D. EDUCATIONAL RESEARCH PROJECTS OF THE VARIOUS INSTITUTES OF THE DANISH SCHOOL OF EDUCATIONAL STUDIES

INSTITUTE FOR DIDACTICS AND METHODOLOGY, *Section for Special Education*

1. *Scope and nature of special pedagogical arrangements in a Danish county*

Research workers: S. ELLEHAMMER ANDERSEN, F. LAMBERT, L. NORD

Starting date: Spring 1970

Probable completion date: 1974

Purpose: To undertake a statistical analysis of school conditions in a Danish county (Storström) with special reference to organising and carrying out special pedagogical arrangements. - To undertake a statistical analysis of these special pedagogical arrangements, and to examine whether they are being carried out in accordance with the Primary School Act of 1958. - To undertake a description and evaluation of those conditions which exert an influence on selection, distribution, establishment, carrying out and concluding the special pedagogical arrangements. - On the basis of the preceding investigations to undertake a supervised establishment of special pedagogical arrangements for specially selected groups of children with diverging school progress.

2. *An examination of various degrees of risk of early brain damage among children in different social milieux*

Researchers: S. HESSELHOLDT, L. LIER, L. NORD

Number of research workers: 8

Starting dates:	1959-61	Collection of medical data
	1968-70	Construction and development of computer controlled test battery
	1969	Selection of children
	1970	Collection of psychological, pedagogical and neurological data

Probable completion date: 1972-73

Purpose: To investigate: the predictive value of various ante- and perinatal medical data with regard to after effects in 10-year-olds, - the coincidence between various kinds of learning difficulties, isolated and general function reductions and adjustment problems in school and home, - the value of a neuropsychological test battery for giving advice in connection with the working out of special teaching.

Procedure/methods: About 200 children are selected on the basis of prospective collected medical data and social class. Each child is tested at about the age of 10 with a neurological and neuro-psychological test battery for about 10 hours. The mother is interviewed concerning the child's social maturity, adjustment to home life and personality development for a period of about 5 hours. The child's classroom teachers are interviewed concerning the child's behaviour, adjustment and proficiency.

INSTITUTE OF GENERAL PSYCHOLOGY

3. *Experimental studies in subliminal stimulation.* A methodological approach to motivated visual perception

Research worker: J. HUNSDAHL

Starting date: 1967

Probable completion date: Spring 1971

Purpose: To clarify some aspects of motivated perception (interests, values, rewards) related to short-term or indirect stimulation.

Procedure/methods: Subjects (students from teachers' training colleges are given a revised edition of the Allport-Vernon-Lindzay *Test of Values*, and different types of materials, including some problem-solving questions) are exposed short-term to contemporary GSR-measurements. Verbal and non-verbal (eg motor) reaction times are recorded, related to different types of instructions.

4. *Computer-assisted theory analyses.* The development of a computer program with a view to carrying out analyses of the structure of psychological and possibly other scientific theories

Research workers: K.B. MADSEN, S. JORGENSEN

Starting date: June 1970

Probable completion date: 1972

Purpose: Development of a method of metascientific research which, among other things, makes it possible to calculate the "explanatory power" of a theory.

5. *Asphyxia and prematurity.* A psychological investigation of after effects of neonatal asphyxia and premature birth

Researcher: L. NORD

Starting date: 1968

Probable completion date: 1970

Summary: 8-10 year old normally endowed children with normal weight at birth and with lack of oxygen at birth diverge negatively from a medically optimal group, whereas this is not clearly the case for the prematurely born children, with or without lack of oxygen. A number of possible causes for this finding are presented.

INSTITUTE OF DEVELOPMENTAL PSYCHOLOGY

6. *An analysis of the syntactic structure of children's spoken language*

Researcher: H. VEJLESKOV

Starting date: August 1968

Purpose: To examine a grammatical system of the Danish written language as a tool to describe children's spoken sentences. It is further planned to examine the language of younger children, of retarded children, and of books for children.

7. *A study of children's problem-solving and creativity activities*

Researchers: H. VEJLESKOV and E. BACH

Purpose: To examine some subject variables by comparing the behaviour of each child in several different problem situations.

8. *Social adaptation related to schooling-in problems*

Researchers: T. SIGSGAARD and E. BACH

Starting date: November 1968

Probable completion date: Summer 1972

Purpose: To investigate factors in social adaptation, considered to be of importance for children's school start, eg dependence, independence, autonomy, security, aggression and anxiety.

Procedure/methods: Interviews with teachers, visits to the classroom and registration of the children's behaviour; some testing.

9. *Adolescents in two societies: Peers, school and family in the United States and in Denmark*

Researcher: V. REIMER JENSEN

Purpose: The purpose has been to replicate James Coleman's study: *The Adolescent Society*, and extend it to include a comparison between statements from adolescents with statements from their mothers and a comparison between adolescents from two different countries.

Conclusions: One conclusion is that some of James Coleman's statements about the adolescent society have not been confirmed. The study has raised some important questions as to the socialisation process of the adolescents; some of these problems are elucidated in the study.

10. *Adaptation (attitude changes) to modern music*

Researcher: J. PAULI JENSEN

Purpose: To obtain information on the psychological effects of repetitive listening to music which is at first unknown to the listener, and to see how different modes of verbal description may change his attitude.

11. *Criteria of literary evaluation in different social groups*

Researcher: J. PAULI JENSEN

Purpose: To obtain information on why different social groups prefer given kinds of literature.

12. *Children's possibilities for gaining experience in relation to the "language" and content of children's TV programmes*

Researcher: J. PAULI JENSEN

Purpose: Among other things, to investigate how far a TV programme must be modified to fit the understanding of younger children.

Procedure/methods: Changing the "film language" of a programme, using it as a stimulus for younger children, when retelling it to other children. Content analyses of what the children tell each other.

CHEMISTRY INSTITUTE

13. *Development of new methods and aids to be applied in teaching chemistry in grades 6-10*

Researchers: L. ENGELS HENRIKSEN, P. NORRILD

Starting date: September 1970

Probable completion date: Autumn 1974

Procedure/methods: Experimental teaching, evaluation.

GEOGRAPHICAL INSTITUTE

14. *Human geography as field work in the* folkeskole (primary and lower secondary school)

Responsible researcher: O. BIILMANN

Number of research workers engaged on project: 7

Starting date: October 1970

Probable completion date: July 1971

Purpose: To develop methods for human geography as field work in primary and secondary schools.

Procedure/methods: Scientific research projects and some teaching projects from other countries are modified to make them suitable for teaching human geography at the lower levels. The newly developed methods are then tried out on pupils of the age groups in question.

15. *Central topics in human geography illustrated through systematic application of quantitative methods and models*

Responsible researcher: O. BIILMANN

Number of research workers engaged on project: 2

Starting date: October 1970

Probable completion date: 1971

Purpose: To develop shorter courses in which central topics in human geography can be illustrated through systematic application of quantitative methods and models.

Procedure/methods: Scientific research projects and some teaching projects from other countries are modified and tried out on pupils of the age groups in question.

PHYSICS INSTITUTE

16. *Teaching in electronics*

Researchers: N. HORNSTRUP, O. NIELSEN and P. VEDELSBY in collaboration with physics teachers

Summary: In an attempt to create a pre-service course in electronics for elementary school teachers, with the emphasis on structure and function, this group has developed materials which students can study by means of block diagrams and other procedures which will emphasise the understanding of integrated circuits and the changes taking place in the structure and function of electronic entities. Materials thus far developed include a simple radio receiver, a complete radio assembly kit, a glossary of electronics terms, a resonance dipmeter, work sheets and a teacher's guide. All materials are written in Danish. Future plans include materials for a course in logic circuitry.

17. *Investigation into the possibility of introducing children of first forms to the working methods of the natural sciences and the formation of scientific concepts*

Researchers: H. LÜTKEN, A. PAULSEN, C.J. VEJE

Procedure/methods: The project will be carried out in co-operation with a number of municipal schools where experiments related to the project and inspired by SCIS (Science Curriculum Improvement Study, Berkeley) are being conducted.

INSTITUTE FOR HISTORY

18. *Didactical research and developmental work in history*

Researchers: L. TOLSTRUP, S. SØDRING JENSEN and N. BONNESEN

Starting date: 1968

Purpose: General didactical ideas and categories have been used in the project which aims at investigating the issues involved in the preparation of history curricula for the primary school. The ultimate objective is to contribute to the establishment of an institute which, by means of theoretical as well as practical educational research and development work, will be in a position to promote innovation in this teaching field.

19. *An investigation of the possibility of building up proficiency in critical thinking on the basis of historical source materials among children in the age group 12-16*

Researcher: L. TOLSTRUP

Starting date: 1968

Probable completion date: 1972-73

Purpose: To investigate the possibility of constructing a curriculum in history for the primary school where work with source materials and promoting proficiency in critical thinking become the main content so that the pupils learn, to a greater degree than hitherto, to support their opinions and control their judgments and to utilise the historical method when making use of the sources of information encountered in everyday life.

Procedure/methods: Selection and preparation of suitable source material for the age level in question.

Name of institute: DENMARKS PAEDAGOGISKE INSTITUT
(The Danish Institute for Educational Research)

Address: Emdrupvej 101, 2400 Copenhagen NV

Director: Erik Thomsen, mag.art.

A. HISTORICAL

1. Year of foundation: 1954; coming into operation: 1955.

2. The Institute was created to satisfy the increasing need for educational research. (There were, at that time, neither research institutes nor professorships in education.)

It was founded on the initiative of a private group of psychologists and educators.

B. STATUS AND PROGRAMME

1. Independent institute.

2. The management of the Institute is in the hands of:

- the Director, who is the executive and scientific administrator,
- a Research Board composed of:

  the Director as chairman, and the Heads of the Departments of the Institute,

  members appointed by the Minister of Education:

  > five professors in the subject of general education and general and applied psychology, one professor of psychiatry, and one professor of statistics with an expert knowledge of psychological statistics, all nominated by the corresponding faculties of the Universities of Copenhagen and Århus; one professor of didactics and teaching methods at the Danish School of Educational Studies, nominated by it; a representative of the School Health Service nominated by the Board of Health; a member of the Institute's Council of Representatives nominated by the Council.

  All appointments are for periods of four years. The Minister of Education may, upon recommendation of the Board, change its composition.

  The Board is the highest authority of the Institute in scientific matters. Its duties are to examine and approve the Institute's research programme, to follow developments in educational and psychological research, and to initiate research projects.

3. Five departments: Educational Methodology, Educational Psychology, Tests, Educational Experiments, Statistics.

4. Present staff

Research staff: 17 full-time, 1 part-time

5. Total budget

1968	1.8 million d.kr.
1969	2.0 million d.kr.
1970	2.2 million d.kr.

Source of finance: National Government

6. The Institute participates in the further training of students and teachers (trainees).

7. Aims:

- to carry out scientific research and studies relating to education, based upon experimental work in schools and other sources of empirical knowledge. Both investigations of direct practical application to educational problems and more theoretical investigations are carried out;
- to assist in the planning and co-ordination of educational experiments outside the Institute, and in the analysis of findings derived from them;
- to provide facilities for students of educational psychology to work as trainees in the Institute, and in collaboration with *Danmarks Laererhøjskole* (The Danish School of Educational Studies) to arrange courses to prepare students and teachers to take part in studies and research projects planned by the Institute;
- to publish reports of its activities, and in a general way provide information relating to matters of interest to educators;
- to construct and distribute tests and similar materials which, owing to their specific nature, are not publicly available.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Undersøgelser af modersmålsundervisningen i folkeskolens første syv år*

(Research on the teaching of Danish (mother tongue) during the first seven years of the comprehensive school)

Responsible researcher: M. JANSEN

Number of research workers: Varies between one and ten

Total time spent on project: Project started in 1964-65, to be continued

Purpose: To develop techniques that enable researchers to make systematic descriptions of what teachers and pupils are doing in school. Parallel to this the project deals with the contents and form of teaching of Danish in the elementary school, grades one to seven.

Procedure/methods: Classroom-observations, enquiries and textbook analysis.

Reference:

A discourse on the formulation of registration form- Danish - in: *Mirrors for Behavior*. An Anthology of Observation Instruments Continued. Philadelphia, 1965. Volume X, 50.1-1 - 50.2-15.

C.2 *Danske laesebøger 1-7 skoleår* (Danish textbooks for grades 1-7)

Responsible researcher: M. JANSEN

Number of research workers: 14

Total amount of time spent on project: From October 1966 to June 1969

Purpose: To give a complete description of all Danish textbooks - both in regard to their formal structure and to their contents.

Procedure/methods: Registrations and analysis.

Conclusions: It is possible to make analyses with general conclusions of textbooks regarding their structure and contents. Writers represented: Danish, Scandinavian, European and authors from other parts of the world. Statements of problems such as "Are texts originally adapted or abbreviated?" "How old are the books?" "How is the world of today reflected in the textbooks?" etc. An initial attempt to a registration of contents is made.

References:

Danish textbook for grades 1-7; Vol. I, A registration and analysis of primers and textbooks to be used for the teaching of Danish, and Vol. II, An index of authors and titles.

On illustrations in Danish textbooks for grades 1-7, Nordisk tidskrift för special pedagogik 1969, *47*(1), 3-35.

C.3 *Ti års tidsskriftartikler om modersmålsundervisningen, børnehaveklasse - 7 skoleår* (The teaching of the mother tongue Danish as reported in ten years' educational journals and periodicals, including an annotated index)

Responsible researchers: M. JANSEN and A. LEERSKOV

Number of research workers: 5

Total amount of time spent on project: September 1969 - May 1970

Purpose: To collect the information contained in all educational journals and periodicals over the last decade, by subject-orientated summaries of all articles.

Conclusions: Initial teaching problems and the instruction of the retarded (especially reading retarded) have met with great interest in the literature studied. On the other hand, a very modest interest in "grammar" and "handwriting" has been found.

C.4 *Meddelelsesbøger og elevbeskrivelse - Overvejelser og oplaeg til en undersøgelse* (Report books and description of pupils. Considerations concerning, and an introduction to a research programme)

Responsible researcher: A. LEERSKOV

Number of research workers: 2

Total amount of time spent on project: June 1969 - September 1970

Purpose: To design and describe a technique, which gradually may make the traditonal awarding of marks unnecessary.

Procedure/methods: The work is a continuation of the department's previous work on report books and award of marks, 1st - 7th forms. The following thesis is advanced: The traditional awarding of marks is a product of the traditional ("organising/differentiating") structure of the school. Therefore marking will be an essential issue in future legislation, expected to be based on an "educationally differentiated" structure of the school. - Suggestions are made in an attempt to enable teachers to draw up the marks according to the teacher's own choice of words, so that the practice of awarding of marks according to the principle of precedence will be supplanted. - Results are expected to be published in December 1971.

Reference:

A description is to be found in Report No. 5 (stencil). *Report books and descriptions of pupils. Considerations concerning and an introduction to a research programme.*

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Om undervisning i deletimer* (Teaching with divided classes, ie different class size)

Responsible researchers: P.E. JENSEN and M. JANSEN

Number of research workers: 3

Starting date: September 1969

Probable completion date: January 1971

Purpose: The teaching in the mother tongue takes place partly in classes with about 26 pupils and partly in divided classes (*deletimer*) with 2 x 13 pupils. This gives possibilities for investigating the class size effect, when other factors are kept constant.

Procedure/methods: Classroom observations are made in 200 lessons. The activities of the pupils and the form of organisation of the class are registered for every full minute. - In the statistical analysis the class size is regarded as independent variable, and pupil activity and form of organisation as dependent variables.

D.2 *Arbejdshaeftematerialer til dansk, børnehaveklasse - 7 skoleår* (Work-books for Danish pre-school class and grades 1-7)

Responsible researchers: M. JANSEN and J. AHM

Starting date: April 1969

Probable completion date: March 1971

Purpose: To analyse the content and form of the activities observed in the teaching of Danish, in connection with the daily work with readers and textbooks, and to examine the teaching of reading and study skill.

Procedure/methods: All Danish work-books used in the teaching of Danish are registered on the basis of a number of activities.

D.3 *Beskrivelse af klasselaererens funktioner* (Analysis of the form teacher's daily work)

Responsible researchers: A. LEERSKOV and M. JANSEN

Starting date: December 1970

Probable completion date: Uncertain

Purpose: By means of a questionnaire and interview it is intended to examine ideas and attitudes prevailing within and outside the school regarding the functions of the form teacher. According to traditional practice in Denmark, the form teacher follows his class from grade one to seven or throughout the period of compulsory education. As a rule the teacher of the mother tongue is also form teacher. It should be possible to set forth in advance the hypothesis that the functions of the form teacher will prove to be so varied that only a minority of them will be able to fulfil the expectations envisaged.

D.4 *Engelskundervisning i folkeskolen II (Gladsaxe)* (The teaching of English as a foreign language in the primary school II)

Responsible researchers: P. MYLOV and G. LEUNBACH (until 1967 J. FLORANDER)

Starting dates: Autumn 1959 (pilot study); Autumn 1960 (main study)

Probable completion date: January 1971

Purpose: To estimate the effects of major variables much discussed in connection with the teaching/learning of the first foreign language. The influence of an earlier introduction of English should be investigated by comparing randomly selected classes in a big community studying English as a subject from grade four (10-year-olds) with classes studying the first foreign language in grade six (12-year-olds) as was normal at the time the project started. In the experimental classes (grade four) the length of lessons should be varied to estimate the effect of half-hour lessons. As far as possible certain variations in method/material should be considered.

Procedure/methods: The sample consisted of 96 classes with approximately 25 pupils in each. Half of these started with English in grade four after the teachers had been given a short introductory training course. The resultant sample is 46 classes from grade four and 39 classes from grade six. All schools in this (urban) community participated and their general socio-economic level was investigated. - The division of lessons in halves met with some difficulties and only 243 of 876 grade four pupils got half lessons during the first year. The 800 pupils in grade six normally had 50 minutes lessons. A similar unequal distribution took place with regard to alternative books and methods for grade four pupils. - Background factors such as general intelligence and sex were controlled (pretests of general language aptitude were omitted later in this project). - Criterion tests were various English language tests (comprehension of written material) and tests in Danish (written material similar to the English tests, and a spelling test). - The testing was conducted after equal intervals in the number of English lessons for the two class-groups with two tests at a time thereby making it possible to investigate the possibility of chaining the tests. - The analysis is in progress and the statistical treatment will be carried out through a special computer program.

Name of institute: STATENS ERHVERVSPAEDAGOGISKE LAERERUDDANNELSE
(The State Institute for Training of Vocational Teachers)

Address: Tuborgvej 177, 2400 Copenhagen NV

Director: Wilhelm Marckmann, cand.psych.

Major research projects in progress

1. *Sammenlignende undersøgelse over nogle skoledannelser i programmeret undervisning* (Investigation into comparative characteristics and effects of some acknowledged programming systems)

Researchers: K. AAGAARD and research assistant

Starting date: 1970

Probable completion date: 1973

Purpose: To develop guidelines as to the choice and use of adequate programming systems. - It is often emphasised that programmed instruction seeks to transform observed principles of learning into educational practice. One might accordingly expect learning programmes to illustrate this endeavour to a greater extent, and also, in view of the great variety of learning situations, to benefit from the application of a larger sample of programming techniques, than are generally available. - The investigation aims at an analysis and description of a variety of programming systems in terms of learning variables, and hypotheses concerning some specific effects of these systems will be tested.

Method: Inquiries into programming guides and handbooks, theoretical studies, experiments.

2. *Udvikling af en paedagogisk beslutningsmodel til CAI* (Development of an Instructional Decision Model for Computer Assisted Instruction (CAI))

Researcher: H. DOHN and research assistant

Starting date: November 1970

Probable completion date: December 1971

Purpose: To facilitate developments of CAI programs.

Method: Literature and theory survey, experiments.

3. *Elevers og laereres holdninger til nogle sider af den nuvaerende erhvervsuddannelse* (Some learner and teacher attitudes towards present day apprenticeship training in Denmark)

Researcher: B. LAUSEN and two research assistants

Starting date: Autumn 1970

Probable completion date: 1972

Purpose: Principally to compare socio-psychological aspects of a planned new educational system with the present one. The existing way in which the training of apprentices in Denmark takes place is about to be altered into a more theoretical cycle. The intention behind the research is, using a descriptive basis, mainly to obtain socio-psychological material which hopefully should be of value in controlling the new training programme. The research will also contain a comparative analysis of the education system in Denmark and other countries. The material should also serve as a frame of reference for possible similar research into the new education system.

Method: Information collection firstly by questionnaire to be answered by a representative selection of apprentices attending vocational schools, and at a later stage by interviews with the teachers connected with the schools in question.

Name of organisation: INSTITUT FOR ANVENDT UNIVERSITETSPAEDAGOGIK (Institute for Studies in Higher Education, University of Copenhagen)

Address: Fiolstraede 24, 1171 Copenhagen K

Director: Ole B. Thomsen, cand.jur. et cand.art.

A. HISTORICAL

1. Year of foundation: 1969.

2. In August 1967 a Pedagogical Advisory Committee submitted a report recommending that an educational centre be established within the University to aid faculty members develop their teaching skills and deepen their educational insight. Simultaneously the centre should carry out research in higher education. The Institute was founded on the initiative of the Rector of the University of Copenhagen, professor,dr.med. Mogens Fog.

B. STATUS AND PROGRAMME

1. The Institute is connected with the University of Copenhagen, but not with any of the faculties. It is directly under the Rector.

The Director of the Institute holds an associate professorship at the University.

2. The Institute has a Board of Governors representing the five faculties.

3. At present there is a single Department of Educational Services and Research. (In 1971 it will be separated into two departments according to function.)

4. Staff in 1970

	Full-time	Part-time
Total	7	1
Teaching and research staff	5	20 (approx)

5. Total budget

1970-71 425,900 d.kr.

Predominant source of finance: The Danish Ministry of Education

6. The Institute offers three kinds of courses in education to university teachers:

- a basic course in higher education offered to all teachers;
- an educational staff course for teachers and administrators at levels of high responsibility;
- special courses in curriculum construction, evaluation, educational technology, group dynamics, etc.

7. The Institute is planning a one-year course in higher education for university teachers.

8. The Institute's educational research will emphasise problems of practical, rather than theoretical, significance to university teachers and administrators. It will include the study of aims, history, evaluation, administration, economy, sociology, as well as the teaching innovations of higher education. In the first two years, priority will be given to teacher training by the micro-teaching method, technology, evaluation, and the aims and objectives of higher education.

C/D. MAJOR RESEARCH PROJECTS

1. *En undersøgelse af forudsaetningerne for studiestrukturen ved Københavns universitet* (A historical study of the curriculum structure at the University of Copenhagen)

Responsible researcher: O. B. THOMSEN

Starting date: 1966

Probable completion date: 1971

Purpose: To discover the social and intellectual factors determining the structure of curricula at the University of Copenhagen.

Procedure/methods: The educational development at the University of Copenhagen from 1732-88 has been studied on the basis of original sources. It has been combined with a study of developments in the intellectual and social field and University reform debate in the same period. With this in view the conceptual world behind the University statutes of 1788 is described and analysed.

2. *Paedagogiske kursers indflydelse på universitetslaerere* (Influence of courses in pedagogy on university teachers)

Responsible researcher: O. B. THOMSEN

Number of researcher workers: 3

Starting date: 1968

Probable completion date: uncertain

Purpose: To develop a course in pedagogy for university staff which satisfies their needs as teachers, curriculum planners and administrators of exams and to study the innovative effects of such courses.

Procedure/methods: A course of 46 hours and additional reading was developed in the years 1968-70 and tested on various groups of university professors and lecturers. Each course was evaluated by the participants. Additional interviews were carried out and follow-up interviews sought information as to changes in teaching behaviour in 1970.

Conclusions: Courses in pedagogy can be offered to university staff which they deem personally gratifying and relevant to problems they meet in their capacity as teachers. Courses seem to have a considerable effect in changing teachers' attitudes and instructional practices.

References:

Nerup, J. and Vejlsgård, R. *Universitetspaedagogik - et forsøg. Ugeskrift for Løger 1968*, p. 2037-41.

Güttler, Fl., Lundstedt, C., Nerup, J. and Vejlsgård, R. *Universitetspaedagogik - andet forsøgskursus. Ugeskrift for Laeger 1969*, p. 1113-16.

Thomsen, O.B. *Rapport om det forsøgsmaessigt afholdte kursus i paedagogik for universitetsmanuduktører etc.* Københavns universitet 1969.

Thomsen, O.B. *Paedagogisk kemi.* Københavns universitet 1969 (stencil).

A final report in English is being prepared.

3. *Personlighedsmaessige aendringer hos universitetsstuderende i løbet af deres universitetsår. Hvordan er disse aendringer relateret til faktorer i universitetsmiljøet og faktorer udenfor* (Personality changes in university students during their university years. How are these changes related to intra and extra university determinants?)

Responsible researcher: W. WITTING

Starting date: February 1972

Probable completion date: Uncertain

Purpose: 100 students from different institutes will be followed up from their matriculation at the university until they finish their studies. Diaries written by the students will be analysed. Periodically unstructured interviews will be taken with the students.

4. *Seminar/Autolecture Project*

Responsible researcher: A.I. BERMAN

Starting date: April 1970

Probable completion date: March 1973

Purpose: To develop procedures for and evaluate the effectiveness of a method of teaching called Seminar/Autolecture devised by the author in 1967. (It is described in detail in "Seminar/Autolecture Experiences", A.I. Berman and A.V. Baez, *American Journal of Physics 38*, p. 313-19, 1970.) - A central idea of the system is to provide the conditions and motivation for an average teacher to make maximum use of his potential for effective communication, aided by current advances in educational technology. It assumes that the goal of modern education is that students of a wide range of ability all gain learning mastery and adaptability in coping with rapid change. The system aims at a restoration of a personal teacher-learner interrelationship despite the pressures of mass education. - Seminar/Autolecture focuses on solving some basic human problems of both the learner and the teacher such as: increasing the motivation of the learner through media involvement and active participation, identification with his specific problems as distinct from those of the group, communication between student and teacher in terms of immediate reinforcement and feedback, and overcoming the natural reluctance of a teacher to innovate. The *modus operandi* requires the use of equipment of high quality and flexibility, but associated with a mass market and therefore of low cost. - The teacher produces and continuously revises media materials with which he is personally identified. By means of a carefully worked-out technique it is possible to attain a high learning potential at less effort than is required for conventional teaching.

Procedure/methods: This system has now received preliminary evaluation at Rensselaer Polytechnic Institute and Harvard University in the United States. The current project consists of

- testing the system with various undergraduates and graduate groups of students in several subjects,
- evaluating the system by pre-test and post-test and by polling students and teachers,
- studies of variations in technique and correlating these with performance.

5. *En undersøgelse af effekten af et kursus i universitetspaedagogik med hensyn til aspektet "påvirkningsstrategier"* (An investigation of the effect of a course in higher education teaching from the aspect of "influence strategies")

Responsible researcher: I. BRUHNS

Starting date: November 1970

Probable completion date: About 1972

Purpose: Quantitative aspects: To what extent do participants in courses in higher education teaching change their own instructional strategies after the course has been completed. - Qualitative aspects: An attempt at evaluation of participants' teaching behaviour according to selected theories and principles of teaching.

Procedure/methods: Primarily observation of teaching behaviour by means of CCTV. Classification of observations. Analysis according to criteria imbedded in selected theories and principles of teaching.

III. EDUCATIONAL RESEARCH PROJECTS CARRIED OUT BY ORGANISATIONS NOT PRIMARILY CONCERNED WITH EDUCATIONAL RESEARCH

Replies were received from the following:

1. Sociological Institute, University of Copenhagen
2. The Danish National Institute of Social Research

Name of institute: SOCIOLOGISK INSTITUT, KØBENHAVNS UNIVERSITET
(Sociological Institute, University of Copenhagen)

Address: Rosenborggade 15, 1130 Copenhagen K

Director: Professor K. Svalastoga, PhD

Institute under the University of Copenhagen, Faculty of Law and Political Science

Research staff: 13

Project Metropolit

Carried out simultaneously in the Greater Stockholm and in the Greater Copenhagen areas.

Objective: To follow a generation of young people of about 10,000 boys from the time of their birth in 1953 to their thirtieth year with a view to ascertaining connections between social background factors and careers, deviant behaviour, and adaptation to family life.

Responsible researcher (project in Copenhagen): Professor K. SVALASTOGA

Started in 1965. Basic data collected in 1965, 1966 and 1968-69.

Sample: All boys born in 1953 in Greater Copenhagen equalling about 10,000 boys.

Special tests will be performed in 1972 when the sample is entering military service.

Final data will be collected in the late seventies and around 1980.

Basic data include:

- 1953 information from the midwife reports comprising details of the newborn, the mother and the occupation of the father.

- 1965 school investigation included four items:
  - . intelligence test with three subscores - spatial, arithmetic, verbal - this was the test of Härnqvist adapted by Weltzer;
  - . creativity test (Medwick adapted by Weltzer);
  - . school class popularity, a series of sociometric questions; and
  - . achievement attitudes, educational, occupational and leisure-time interests.
- 1966 two tests were administered, a reading test and an arithmetic test. At the same time, the schools provided information on the address of the boys, the occupation of the fathers and the present position of the boy in the school system; marks were not collected.
- 1968-69 a survey of the families involved in the study was performed by interviews. 3,165 mothers were selected, and the sample was stratified by the results of the 1965 intelligence tests of the boys.

Main aim of the study is to deal with social mobility - consequently major emphasis is put on such parametric values that seem to be of major importance to research on social differentiation generally.

Name of institute:	SOCIALFORSKNINGSINSTITUTTET (The Danish National Institute of Social Research)
Address:	Borgergade 28, 1300 Copenhagen K
Director:	Henning Friis, cand.polit.

A. HISTORICAL

Year of foundation: 1958.

Established according to Act No. 101 of 18 April 1958.

B. STATUS AND PROGRAMME

The Institute is administered by the Research Board and the Director. The members of the Board are appointed by the Minister of Social Affairs on recommendation of the Universities of Copenhagen and Århus and of the administrative authorities mentioned in the Act. The Minister of Social Affairs will on recommendation of the Board appoint its Chairman and Vice-Chairman. The present Chairman of the Board is Professor Carl Iversen, dr.polit.

Research personnel 31, others 34.

Budget

1968-69	4,331,975 d.kr.
1969-70	3,511,900 d.kr.
1970-71	4,162,000 d.kr.

Aims: On the basis of the social sciences to carry out, further and coordinate investigations and research with a view to elucidating social problems and conditions including social security, public welfare, labour conditions and the social aspects of family, youth, housing and health problems.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *De 14-20 åriges uddannelsesvilkår* (The educational conditions of the 14 to 20-year-olds)

Responsible researcher: E. JØRGEN HANSEN

Total time spent on project: 3 years

Purpose: To get a broad picture of the educational conditions of 14 to 20-year-olds.

Procedure/methods: Analysis based on interviews with nearly 4,000 14 to 20-year-olds from all over the country and with about 1,150 *gymnasie* pupils.

Conclusions: Marked social inequality in recruitment to secondary education.

References:

Jørgen Hansen, E. *De 14-20 åriges uddannelsessituation 1965. Bind I. Social og geografisk rekruttering.* Socialforskningsinstituttets publikation 31, København 1968. (The educational situation of Danish youth of 14 to 20 years of age in 1965. Vol. I. Social and geographical origin.)

Jørgen Hansen, E. The social recruitment to the *gymnasium* in Denmark. Paedagogisk Forskning. *Scandinavian Journal of Education Research.* No. 1, 1969.

Jørgen Hansen, E. *Ungdom og uddannelse. De 14-20 åriges uddannelsessituation 1965. Bind II.* Socialforskningsinstituttets publikation 47, København 1971 (Youth and education, the educational situation of Danish youth of 14 to 20 years of age in 1965, Vol. II.)

C.2 *Teknik og erhvervsuddannelse* (Technology and occupational training)

Responsible researchers: H. BROGAARD and D. BUNNAGE

Total time spent on project: 2 years; the project is to be continued.

Purpose: To examine the demands for training and retraining of workers in certain industries with different technologies, and the workers' reaction to those demands.

Procedure/methods: Analysis based on interviews with about 750 workers and foremen over three industrial branches: engineering, chemicals and printing. 17 firms representing different technical levels.

Conclusions: Work still in progress. The explorative survey (published and noted above), points to a general positive correlation between technical changes in an industrial branch and development of training, with some exceptions, for example within the chemical industry.

Reference:

Bunnage, D. and Brogaard, H. *Teknisk udvikling og erhvervsuddannelse,* 1965-68. Socialforskningsinstituttets studie nr. 15. København 1969. (Technical changes and changes in occupational training, 1965-68, Explorative survey.)

D. MAJOR RESEARCH PROJECT IN PROGRESS

En generation unges uddannelses- og erhvervsforløb (A longitudinal study of the educational and occupational choice of a generation of young people)

Purpose: To study the educational and occupational choice of young people by following them from their fourteenth to their eighteenth year.

Procedure/methods: Longitudinal survey method is used and mostly transferred by questionnaires.

I. EDUCATIONAL RESEARCH POLICY

Stimulation and co-ordination

A.1 *The Research Council for Social Sciences*, which is one of the six research councils subordinate to the Ministry of Education, also decides on the order of priority of research projects in the field of education and on the allocation of budgetary funds for such projects. Like that of all the other research councils, the purpose of the Council is to prepare plans for the Ministry of Education for the development of research in its respective field, to support outstanding research programmes and to initiate such programmes as well as to propose the practical application of research results. The Chairman and the members of the Council are qualified researchers in the various fields of social sciences. The Research Council for the Humanities also deals, to some extent, with matters related to educational research.

The Institute for Educational Research, which is attached to the University of Jyväskylä, became a national research institute in 1968 (see II, 1). The purpose of the Institute is:

- to conduct basic educational research and to undertake educational research for practical application,
- to carry out educational research projects and investigations at the request of educational authorities for the purposes of the said authorities,
- to promote the development of instruction in pedagogic subjects and of educational research in the universities and of university pedagogics in general, and
- to provide information both in Finland and abroad about educational research.

The Ministry of Education appoints two of the seven members of the Institute's board.

The National Board of Schools is a central administrative board under the Ministry of Education. The administrative structure of the National Board of Schools was reorganised in 1969. In connection with this reorganisation a *Research and Development Bureau* and a *Planning Bureau* were established in the Board. These Bureaux are mainly responsible for the organisation of educational research under the National Board of Schools. The Research and Development Bureau is in charge of educational experimentation and the research activities connected therewith. One of the main tasks of the Planning Bureau is to collect information and to commission investigations for the purposes of the general planning of the school system. The Planning Bureau to some extent also undertakes research projects, which serve the planning functions of the Bureau.

The Council for School Research was appointed on 1 July 1970 under the Ministry of Education to serve as a co-ordinating body for school administration and educational research.

The tasks of the Council are:

- to draw up a general programme for the development of school research and to keep it continuously up to date;
- to promote co-operation and mutual information between school administration and school research so that the results of school research may be utilised at all stages of decision-making on schools and education;
- to draw up the policy for and to co-ordinate the school research conducted by various bodies and institutes by giving the institutes and the researchers topics for research projects and recommendations concerning division of labour; and
- to carry out other tasks which are assigned to the Council in due order.

The Council is presently drafting the general programme for the development of school research referred to above.

The Finnish Society for Educational Research also promotes educational research.

Some other bodies, such as *The Finnish Population and Family Welfare League* and the *Union of Rural Municipalities* have also conducted educational research mainly concerned with the reform of the Finnish school system and school planning. (See also under III)

A.2 The co-ordination of educational research projects involves the following of the above named organisations:

The Research Council for Social Sciences.

The Institute for Educational Research, Jyväskylä. The purpose of the Institute is also to act as a national co-ordinator of educational research.

The National Board of Schools arranges joint conferences for researchers and education authorities in order to co-ordinate their activities.

The Council for School Research.

Finance

A.3 *The Research Council for Social Sciences* decides on the allocation of government grants for educational research purposes.

The Department for Higher Education and Research of the Ministry of Education also grants funds *in casu* for certain individual educational research purposes.

The Institute for Educational Research, Jyväskylä is government financed.

The National Board of Schools has a special allocation in its budget for educational research.

Private societies and foundations, eg the Society for the Advancement of Educational Research in Jyväskylä, the Finnish Pedagogical Association in Helsinki, the Finnish Cultural Foundation, the Alli Paasikivi Foundation, also provide grants for educational research.

Priority fields

B. Research into pedagogic history, which was formerly the main form of educational research in Finland, has lately been left more aside; attention is now focused on the pedagogics of higher education, on the measuring of school results and problems related to curricula, learning processes and teacher training. Attention has also been paid to individualised education including enrichment programmes (for deprived children). Owing to the gradual transition to a new educational system, the "basic school" of a comprehensive type, increasing attention has lately been paid to experimental pedagogic research. The school reform will be implemented gradually during a period of ten years starting in 1970.

The research activities of the *National Board of Schools* centre at present on projects aiming at long-range educational planning and the collection of basic data on the school system, viz:

- The preparation of a detailed working plan referring to the overall planning of the school system;
- An analysis of the need of teaching staff and a continuous checking thereof with the help of a card index of teachers;
- The co-ordination and development in co-operation with the Central Statistical Office of the annual collection of data on the school system undertaken by the Board so as to meet the requirements of the basic school, and the organisation of the collection of data so as to make it adaptable to the new school system;
- A detailed investigation of the costs of education and the development of economic planning in the field of education;
- The compilation and development of a card index of school regulations in order to enable the Board to control and direct the municipalities more efficiently in their daily education activities;
- The extension of all basic surveys and investigations to cover also adult education and popular education as well as educational activities not subordinate to the National Board of Schools;
- Investigations referring to the preparation of municipal school plans such as the drafting and testing of a purposeful planning form and the direction of the municipalities in the preparation of the transition to the basic school;
- Research activities related to pre-school education
    - . the attitude of parents to pre-school education,
    - . an analysis of the need for educational material required for pre-school education,
    - . research concerned with the development of curricula for pre-school education;
- Development of material for auxiliary education;
- Research related to the development of the differentiation solution of the basic school;

- The analysis of the correspondence between the general and the subject-related aims and contents of the curriculum of the basic school;
- The development of pupil evaluation;
- Analysis of the needs of educational material at various levels of education.

Information

C. *The Finnish Society for Educational Research* published in 1968 a list of educational research projects in progress in Finland in the spring of that year. Such a list is now prepared and published annually by the *Institute for Educational Research* in Jyväskylä. This register has been distributed to various research institutes and administrative authorities. One of the tasks of the Institute for Educational Research is to keep both researchers and educational and other authorities in Finland informed about the results of completed research.

The National Board of Schools arranges, when necessary, information conferences at which the results of completed research are published. School and education authorities and teachers are also informed by the Board at continuation courses about the results of recently completed research. The National Board of Schools also issues two report series, one dealing with experimental educational activities, the other with research referring to educational planning.

The Council for School Research has been appointed specifically for the task of disseminating information on educational research.

New trends

D. The development of the Institute for Educational Research in Jyväskylä into an efficient institute at the national level is expected to lead in the future to some changes in the present organisation of educational research.

The work of the Council for School Research is also expected to create better conditions for co-operation between educational research institutes as well as for co-operation between administration and research.

II. ACTIVITIES OF EDUCATIONAL RESEARCH ORGANISATIONS

Replies were received from the following:

1. Institute for Educational Research, University of Jyväskylä
2. Department of Education, University of Helsinki
3. Institute of Education, Academy of Åbo
4. Institute of Education, University of Jyväskylä
5. Institute of Education, University of Oulu
6. Institute of Education, University of Tampere
7. Institute of Adult Education, University of Tampere
8. Institute of Education, University of Turku

Name of institute: KASVATUSTIETEIDEN TUTKIMUSLAITOS
(Institute for Educational Research)

Address: University of Jyväskylä, Jyväskylä

Director: Juhani Karvonen, DrEd

A. HISTORICAL

Year of foundation: 1957.

The need for a central institute for basic and applied research in education and for a clearinghouse in educational matters had been felt for quite a long time, but the research programme necessitated by a comprehensive school reform forcefully brought this need to the fore. The Institute was founded on private initiative, and on the basis of an interim report of the University Committee.

B. STATUS AND PROGRAMME

1. The Institute is attached to the University of Jyväskylä and is directly subordinate to its central administration. The staff, however, have no teaching duties or other working obligations outside the Institute.

2. The Institute has a seven-member board, which consists of university faculty members and two other members appointed by the Ministry of Education representing educational research and public education. The board supervises the Institute's activities and decides on research programmes and administration of finances.

3. The Institute has four departments:

- Department for Applied Research,
- Department for Educational Methodology,
- Department for Information and Documentation,
- Department for School Research, a separate department carrying out the projects financed by the National Board of Schools.

4. Staff in 1970

	Full-time	Part-time
Total	33	12
Teaching and research staff	20	5
Researchers	6	2

5. Budget

1968	500,000 FMK	(salaries included)
1969	750,000 FMK	(" ")
1970	1,026,000 FMK	(" ")

The main source of finance is the State.

6. The Institute participates in educational post-graduate training, supervised by the professor of educational methodology of the Institute.

7. The purpose of the Institute is:

- to conduct basic educational research and to undertake educational research of practical application,
- to carry out educational research projects and investigations at the request of educational authorities for the purposes of the said authorities,
- to promote the development of instruction in pedagogic subjects and of educational research in the universities, and of university pedagogics in general, and
- to provide information, both in Finland and abroad, about educational research.

Research activity is focused on the following fields:

- Research methodology concerning the goal-setting of schooling and education; decision-making on school education;
- Teachers' characteristics and teaching techniques;
- Development of measuring instruments for pupils' abilities, personality and school achievements;
- Linguistic development and language learning;
- University administration and pedagogics;
- Study and development of teaching materials and methods.

The research team of the National Board of Schools working in the Institute has mainly dealt with questions of school reform and comprehensive school experiments.

Continued international projects are the study of the International Association for the Evaluation of Educational Achievement, and the ITPA project on the development of language and communication.

Special attention has been paid to information activities both in Finland and abroad, of which could be mentioned *Kasvatus, The Finnish Journal of Education* published by the Institute.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Kunnallisten kokeilukeskikoulujen ja oppikoulujen ruotsin ja englannin kielen koulusaavutukset* (School achievements in Swedish and English of experimental municipal middle and secondary school pupils)

Researchers: S. HÄMÄLÄINEN, S. TAKALA

Duration of study: 1967-70

Purpose: To study whether there are any significant differences between the foreign language skills of pupils at the municipal middle school (late differentiation from grade VI) and secondary school (early differentiation from grade IV).

Method: Analysis of differences of means between matched groups.

Conclusions: The results indicated that a slight gain due to early differentiation (secondary school pupils) is levelled out by the end of the final grade (IX). Thus it is concluded that both school types produce comparable foreign language skills.

Reference:

Hämäläinen, S. and Takala, S. *Kunnallisten kokeilukeskikoulujen ja oppikoulujen ruotsin ja englannin kielen koulusaavutukset.* Experiment and Research Report No. 29/1970, National Board of Schools.

C.2 *Kokeiluperuskoulun yläasteen oppilasaineksen valikoitumisesta kaupungeissa* (Selectivity of the pupils at the experimental upper comprehensive school in towns)

Researcher: V. JURAMA

Purpose: As title.

Method: Comparison of the social background and school success in grade IV of the primary school of unselected age groups (IV-grade primary school pupils) and of VIII-grade pupils at the experimental upper comprehensive school. Pupils' parents were divided into four social classes on the basis of objective criteria.

Conclusions: Upper comprehensive school pupils had, on the average, poorer success in grade IV of the primary school than the other age group. Good pupils from the upper social classes moved from grade IV to the secondary school in greater numbers than other pupils. In comparison, fewer comprehensive school pupils came from social classes I and II, and fewest of all from the lowest (IV) social class, owing to the exclusion at this stage of poor pupils from the experimental comprehensive school. The selectivity of the pupils at the experimental upper comprehensive school makes it difficult to draw conclusions from the experimental results.

Reference:

Jurama, V. *Kokeiluperuskoulun yläasteen oppilasaineksen valikoitumisesta kaupungeissa.* Experiment and Research Report No. 22/1969, National Board of Schools.

C.3 *Koulunkäynnin lopettaneet oppilaat kokeiluperuskoulun VIII luokalla 1968-69* (School leavers in grade VIII of the experimental comprehensive school in 1968-69)

Researcher: P. KÄPPI

Duration of study: 4 months (material from a data bank)

Purpose: To obtain information on pupils leaving the comprehensive school at grade VIII, without continuing to the optional grade IX.

Methods: Pupils leaving the comprehensive school (N=160) were compared with those continuing it (N=850), by using the methods of variance analysis and Chi-square for 47 variables chosen from the data bank of the comprehensive school.

Conclusions: Pupils leaving the comprehensive school were in a less favourable position as regards variables for home background and school conditions (lower social status of parents, more children in the family, smaller size of the lower comprehensive school, longer school journeys), most of them were boys, their attitude towards school was more negative, they had poorer results in intelligence measurements and their school success was also poorer, they chose lower (less comprehensive) level courses. The results raise the question whether the differentiated upper comprehensive school is at all able to provide equal possibilities for all children regardless of place of residence or social status; especially if children from poor circumstances automatically enter the lower level courses.

Reference:

Käppi, P. *Koulunkäynnin lopettaneet oppilaat kokeiluperuskoulun VIII luokalla lukuvuonna 1968-69.* Experiment and Research Report No. 21/1969, National Board of Schools.

C.4 *Koulumatkat* (School journeys)

Researcher: P. KÄPPI

Duration of study: 4 years

Purpose: To map the transport difficulties of pupils from sparsely populated areas, and to study the relations between school journeys and school achievement.

Methods: The subjects were 2,100 lower comprehensive school pupils in grades I, II, IV and VI from developing areas in Finland, and about 1,000 upper comprehensive school pupils from southern and south-western Finland. Methods: deliberate matching by the equal-pairs method, analysis of variance.

Conclusions: The results indicated that, under prevailing administrative regulations, the length of journeys to and from school causes no significant differences in the school achievement variables. Pupils having a long journey, however, tended to have poorer school achievements. The length and frequency of waiting hours as well as unsatisfactory waiting conditions were clearly revealed. Guidance and supervision during travel was found necessary. A recommendation was made to set a maximum limit for the length of journeys and for the time spent on them.

C.5 *Kotitaustan yhteydestä oppilaiden koulunkäyntiin liittyviin muuttujiin* (Relationships between pupils' home background and school attendance variables)

Researcher: V. JURAMA

Purpose: To study how the variables of background of IV-grade primary school pupils at urban schools are related to school attendance variables and to parents' aims and attitudes concerning their children's school attendance at a certain period (1966). Assumptions were made of the results of the investigation on the accumulation process with time.

Method: 360 children and their families obtained by sampling. Parents were divided into four social groups on the basis of objective criteria. Each group was represented by the same number of pupils and families. 80 variables were chosen for analysis, some for pupils' school success and their socio-economical background, others for parental attitudes and estimates concerning the schooling of their children.

Conclusions: The results indicated that school success, transition to the secondary school, and, to some extent, intelligence measured by 6 factor tests, and parental interests, aims and attitudes concerning the schooling of their children, had nearly linear correlation to the parents' social class. On average, more children from the upper social classes had good school success and moved to the secondary school than those from the lower social classes, even when no differences occurred in school success. More parents from the upper social classes had some contact with the school and wanted their children to receive higher education than those from the lower social classes. Social class did not, however, correlate with differences in estimation, arrangements of time for the school year (eg length of summer vacation), supervision of children's homework, or attitude towards the authoritativeness of school education. About half of the variables correlated with the most central variable, social class. The variables were assumed to have a reciprocal effect, and accumulate in the direction of the central variable.

Reference:

Jurama, V. *Kotitaustan yhteydestä oppilaiden koulunkäyntiin liittyviin muuttujiin.* Experiment and Research Report No. 31/1970, National Board of Schools.

C.6 *Jyväskylän yliopiston opiskelijakunta 1966* (Students at the University of Jyväskylä in 1966)

Researchers: K. KIVISTÖ, R. JULKUNEN

Duration of study: 2½ years

Purpose: Data were gathered on students enrolled at the University of Jyväskylä in 1966, mainly on their social background, and home and study conditions. The analysis was meant to yield some descriptive information about the students at the time the data were collected, and an attempt was made to compare it with the situation in other universities.

Method: Descriptive survey analysis and correlative analysis with a population of 800 students.

Conclusions: The importance of students' social background was emphasised in all descriptive results of the investigation. Parents' social class was found to be essential for success in studies; a low social class made university entry less probable, and has continuous effect throughout studies by producing circumstances which result in poorer success than predicted on the basis of previous school success.

Reference:

Kivistö, K. *Jyväskylän yliopiston opiskelijakunta 1966*. Report No. 51/1969, Institute for Educational Research, University of Jyväskylä.

C.7 *Opettajan sanastokirja* (A vocabulary manual for teachers)

Researchers: J. KARVONEN, K. RÖMAN, A. TAKALA, O. YLINENTALO

Duration of study: 5 years

Purpose: To map the central vocabulary of III and IV-grade primary school pupils in their everyday speech and writing. To study the dependence between the frequency of words used, and pupils' grade, sex, domicile and social background. An attempt was also made to find the relative frequency of words used.

Methods: The subjects were 8,708 pupils (boys and girls). Vocabulary was gathered from pupils' free essays in all primary schools of Central Finland, a population of 8,700 pupils. The titles were distributed randomly among the different schools in order to avoid regional differences in language. Statistical information made it possible to ascertain that the number of pupils was sufficient for each title. All words were collected and written on cards (854,036); the number of individual words was 17,124.

Conclusions: The study proved to be an important contribution to the composition of textbooks and exercise books. It must be established what level of abstraction is most appropriate for effective learning and the exchange of required information. It is essential to know what kind of learning experience facilitates the attainment of the goals of instruction set in curricula; as a problem of vocabulary, with what kind of vocabulary is information best delivered to pupils in such a way that the learnt matter would constitute an integrated entity.

Reference:

Karvonen, J. *et al.* *Opettajan sanastokirja.* Gummerus 1970, Jyväskylä.

C.8 *Tehostetun oppilaantuntemuksen kokeilu* (An experiment on increasing teachers' knowledge of their pupils)

Researchers: M. RENKO, R. ALA-KURIKKA

Duration of study: From 1967-68; to be continued

Purpose: An experiment initiated by the Teacher Training College of the University of Jyväskylä, aimed at mapping the methods of increasing teachers' knowledge of their pupils' abilities, personality, school achievements and home conditions.

Methods: During the first year of the project (academic year 1967-68) only one class participated in the study, in the following year the number of classes was three and the experiment will gradually be extended to involve most grades. Pupils' personality traits are rated by teachers, and this information is given to the parents. More than 95% of the parents wanted this information during the first year of the experiment.

Reference:

Renko, M. and Ala-Kurikka, R. *Tehostetun oppilaantuntemuksen kokeilu.* Report No. 43/1968, Institute for Educational Research, University of Jyväskylä.

C.9 *Television vaikutus lasten piirustuksiin ja sanavarastoon* (The influence of TV on children's drawings and vocabulary)

Researchers: P. LAHTINEN, H. TAIPALE

Duration of study: 4 years

Purpose: The purpose of Part I of the investigation (drawings) was to study the effects of TV on children's pictorial expression, both on thematic choice and three formal variables indicating the development level of their expression of perspective, movement and detail. Part II was concerned with the effects of watching TV on children's vocabulary.

Method: Part I: Independent variables: watching of TV, number of home stimuli, intelligence. Dependent variables: thematic aspects of drawings, three formal drawing variables. - Part II: Independent variables: watching of TV, intelligence, social status. Dependent variables: general vocabulary, special vocabulary. - Both studies were carried out in districts covered by the television network during the time between measurements.

Conclusions: Part I: Subjects who used to watch TV first chose stereotyped themes, and then changed to imaginary topics. TV had greatest influence on the formal variables in grade I, but not in grade III. - Part II: The amount of watching TV had no effect on the enlargement of the basic vocabulary, while both watching TV and the introduction of TV to the district had some effect on that of the special vocabulary, most clearly in the grup of 12-year-old children.

Reference:

Lahtinen, P. and Taipale, H. *Television vaikutus lasten piirustuksiin ja sanavarastoon.* Report No. 60/1970, Institute for Educational Research, University of Jyväskylä.

C.10 *Televisio-opetuksen tarve Suomen korkeakouluissa* (A study on the pedagogical need of TV instruction in Finnish universities)

Researchers: M. RENKO, P. HAKKARAINEN

Duration of study: March - June 1970

Purpose: The Ministry of Education set up a Committee in 1969 for planning the employment of TV in Finnish university instruction. The main object of the study was the definition of the need for such aid, particularly from the point of view of education (more efficient learning).

Methods: The subjects (about 60) under study were those taught at Finnish universities and related institutions of higher education. A choice was made in advance of those general learning situations in which TV or film would be an efficient means of achieving good learning results. Professors of these subjects, interviewed as experts, answered for each lecture series, course, etc., how many hours per academic year these TV situations occur or should occur.

Conclusions: There was found to be need for TV instruction in all university subjects, greatest in educational studies included in teacher training (over 90% of all lessons), physical education (48%), medicine (43%), and educational and social sciences (23%).

Reference:

Renko, M. and Hakkarainen, P. *Televisio-opetuksen tarve Suomen korkeakouluissa.* Report No. 58/1970, Institute for Educational Research, University of Jyväskylä.

C.11 *Ohjelmoidun opetuksen periaatteiden soveltaminen opettajajohtoiseen luokkaopetukseen* (Application of programmed learning to teacher-conducted class instruction)

Researcher: P. PIHANEN

Duration of study: 6 months

Purpose: To compare programmed teaching material as a medium, the results attained at school and at home with those of teacher-conducted, programmed class instruction.

Method: Test for comparative groups.

Conclusions: Programmed instruction led to the same level of results as programmed, teacher-conducted class instruction, but in a remarkably shorter time.

Reference:

Pihanen, P. *Ohjelmoidun opetuksen periaatteiden soveltaminen opettajajohtoiseen luokkaopetukseen.* Experiment and Research Report No. 30/1970, National Board of Schools.

C.12 *KTL:n Diagnostisia kirjoituskokeita peruskoulun II ja III luokille. Kokeiden standardointi ja kirjoitusvirheiden faktorianalyyttinen tutkimus* (KTL diagnostic writing tests for grades II-III of the comprehensive school. Standardisation of tests and a factor analytical study of writing errors)

Researchers: I. RUOPPILA (Project leader), K. RÖMAN, M. VÄSTI

Purpose: Standardisation of a dictation test for grades II-III of the comprehensive school, and a factor analytical study of writing errors, changes in their factor structure, and differences in error profiles between these grades.

Methods: Dictation of stories and individual words. Errors classified primarily according to a phenomenological error category including 16 types of error.

Conclusions: With a few exceptions, individual error categories were satisfactorily reliable. The factor structure of errors was very much the same at both class levels. On average, differences between class levels were great, probably due to teachers' different estimation of errors. The latter differences were not, however, related to pupils' different intelligence.

Reference:

Ruoppila, I., Röman, K. and Västi, M. *KTL Diagnostic Writing Tests for Grades II-III of the Comprehensive School. Standardisation of Tests and a Factor Analytical Study of Writing Errors.* Report No. 50/1969, Institute for Educational Research, University of Jyväskylä.

C.13 *KTL:n diagnostisia lukukokeita peruskoulun II ja III luokille. Kokeitten standardointi ja lukuvirheiden faktorianalyyttinen tutkimus* (KTL diagnostic reading tests for grades II-III of the comprehensive school. Standardisation of tests and a factor analytical study of reading errors)

Researchers: I. RUOPPILA (Project leader), K. RÖMAN, M. VÄSTI

Purpose: The standardisation of a set of tests by means of which reading speed and accuracy can be studied at II and III-grade level, and an analysis of errors yielding information for setting up a classification of common reading errors.

Methods: Tests designed for this investigation were presented to 409 subjects (207 boys, 202 girls) who represented the population of II-III-grade pupils in Central Finland. Norms are separate for reading speed and accuracy, as these factors of reading appear to be relatively specific at this grade level. Tests have primarily been designed for teachers, but they can also be used in child study bureaux, reading clinics, and other related institutions.

Reference:

Ruoppila, I., Röman, K. and Västi, M. *KTL:n diagnostisia lukukokeita peruskoulun II ja III luokille.* Report No. 41/1968, Institute for Educational Research, University of Jyväskylä.

C.14 *Urheilujohtajien urheiluaatteet* (Sports leaders' sports ideology)

Researchers: K. HEINILÄ, P. KIVIAHO

Duration of study: Material gathered in 1967.

Purpose: To analyse and describe Finnish sports leaders' sports ideology. The present study aimed to describe sports leaders' basic ideas about sports, and to analyse the contents and consistency of sports ideologies.

Method: Questionnaires to 2,356 persons representing national Finnish-speaking sports organisations mailed in autumn 1967.

Conclusions: The results indicated that the majority of sports leaders regarded as the primary objective of sports activities the development of people's personal interest in sport and physical education. Besides this more general view, there appeared clear differences between groups in attitudes towards competitive sport and recreational training. As regards sport as an objective and a pastime, those emphasising its competitive aspect were younger or male sports leaders with a lower social status, whereas older or female sports leaders with a higher social status considered recreational training more essential.

References:

Heinilä, K. and Kiviaho, P. *Portrait of the Finnish Sports Leader.* Report No. 48/1968, Institute for Educational Research, University of Jyväskylä.

Heinilä, K. and Kiviaho, P. *Sports leaders' sports ideology.* Report No. 55/1970, Institute for Educational Research, University of Jyváskyla.

C.15 *Oppikoulun poikien liikunnanopettajien urheiluharrastukset* (Sports interests of the physical education teachers of secondary school boys)

Researcher: E. MATTILA

Duration of study: Material gathered in 1966, investigation completed in spring 1970.

Purpose: The study was first focused on the whole material, and then on groups of teachers classified on the basis of their basic education, age and size of working locality (town, etc). To get an overall picture of the use of leisure time, other pastimes were also studied as a whole. An attempt was made to detect some regularities in the choice of sports activities, and to study the inter-dependence of individual teachers' leisure-time sports activities.

Method: Material was gathered through questionnaires sent to all state-owned secondary schools, and to a random sample of 50% of other types of school. The final sample consisted of 39% of the population (308 teachers), ranging from 45%-37% according to type of school (27% no reply).
Main methods: cross-tabulation, correlation analyses.

Conclusions: Competitive and other sports interests were rather common, as were participation in the leadership of school-organised sports activity, and in various sport organisations. - Teachers participating actively in various sports activities also had more leisure-time activities of other kinds. - With the exception of competitive sport, the most active teachers were 31 to 40-year-olds. Rural teachers were more frequent participants in sports organisation activities than urban teachers. - With the exception of competitive sport, sports activities correlated highly to each other.

Reference:

Mattila, E. *Oppikoulun poikien liikunnanopettajien urheiluharrastukset.* Report No. 54/1970, Institute for Educational Research, University of Jyväskylä.

C.16 *Tietojen ja asenteiden oppiminen maantieteelliseen oppiainekseen liittyvien henkilökuvien miellyttävyyden funktiona* (Learning of facts and attitudes as the function of the pleasantness of characters in geographical learning material)

Researcher: J. KARI

Duration of study: 4 years

Purpose: To study the affective and cognitive influences of characters appearing in learning material.

Method: The subjects were 300 IV-grade primary school pupils aged 10. The method used was variance analysis.

Conclusions: By means of characters appearing in verbal information and varied in the dimension pleasant - unpleasant, it is possible to affect subjects' attitudes towards the characters of stories.

Reference:

Kari, J. *Tietojen ja asenteiden oppiminen maantieteelliseen oppiainekseen liittyvien henkilökuvien miellyttävyyden funktiona.* - Summary: The learning of facts and attitudes as the function of the pleasantness of characters in geographical learning material. *The Finnish Journal of Education,* 1, 1970, No.2, 123-26.

C.17 *Käsityötaidon yhteys eräisiin sensomotorisen ja älyllisen lahjakkuuden osatekijöihin* (Relationships between handwork and some factors of sensomotor and intellectual ability)

Researcher: J. PURO

Duration of study: 2 years

Purpose: To find out which factors of intelligence have strongest relations to handwork.

Methods: Multivariate methods.

Conclusions: MD-factor (girls) and Ai-factor (boys) of the factors of dexterity, and S-factor of those of intelligence are most closely related to handwork.

Reference:

Puro, J. *Käsityötaidon yhteys eräisiin sensomotorisen ja älyllisen lahjakkuuden osatekijöihin.* Report No. 59/1970, Institute for Educational Research, University of Jyväskylä.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Esikouluikäisten taidekasvatusta ja luovien kykyjen virittymistä koskeva tutkimusprojekti* (Art education and creativity of pre-school children)

Researchers: J. KARVONEN, A. LAHTINEN, L. PERKKI, S. TASOLA,
P. LIIKANEN (Project leader), M. FORSVIK (Research assistant),
I. TAHVANAINEN (Research assistant)

Starting date: September 1970

Probable completion date: 1973

Purpose: Definition of the aims of art education, empirical research on problems connected with these aims. A survey on the child's cognitive, emotional and social environment, his development (susceptibility), and the interaction of these.

Method: Experimental.

D.2 *Kvantitatiivisten käsitteiden kehittäminen esikouluiässä [6-vuotiaat]* (Development of quantitative concepts at pre-school age [6])

Researchers: P. MALINEN (Project leader), M. HYTÖNEN

Starting date: August 1970

Probable completion date: May 1971

Purpose: Contribution to the preparation of the pre-school curriculum.

Method: Comparative, theoretical analysis.

D.3 *Sanavaraston rikastuttamisohjelman vaikutus lasten piirustuksiin* (Effect of a vocabulary enrichment programme on children's drawings)

Researcher: A. LAHTINEN

Starting date: 1965

Probable completion date: 1970

Purpose: As many studies have revealed that the conditions for children's development and learning are influenced by the kind of developmental stimuli they receive at home and in home environment, an attempt was made to find out whether a systematic vocabulary enrichment programme could have an effect on the content and formal characteristics of children's drawings. - Sub-project of the research programme on linguistic development and language learning co-ordinated by the Institute for Educational Research.

Methods: Subject groups from remote villages were given exercises in order to enrich their vocabulary (explanations, pictures, plays). Test and control groups were matched. Intelligence was tested by the KTK performance tests, and three level groups were formed. The subjects made a drawing on nine topics, each of which was rated for content (eg essential features) and formal (eg use of colours) characteristics.
N=76 pupils in grade I of the comprehensive schools of remote country villages.

D.4 *Perustiedot kokeiluperuskoulujen oppilaista* (Basic information on the pupils at the experimental comprehensive school)

Researcher: P. KÄPPI

Starting date: 1967

Probable completion date: Follow-up

Purpose: For following the results of systematic experimentation, basic data have been gathered on the pupils at the experimental comprehensive schools since 1967. The data bank contains information on the upper comprehensive school, the number of schools being about 10. The purpose is to include in the study one school from each economic area, so that there will be schools of different size, having a different curriculum, etc.

Methods: Material is gathered in co-operation with vocational counselling authorities. The results of their measurements and inquiries have been transmitted to the data bank for the purpose of school investigations, without disclosing confidential information to the public. The data are transmitted on punched cards and magnetic sheets for EDP.

D.5 *Kokeiluperuskoulun käyneiden oppilaiden jatkoopinnot lukioissa ja nuorisoasteen kouluissa* (Further studies of experimental comprehensive school pupils at the secondary stage)

Researcher: P. KÄPPI

Starting date: September 1970

Probable completion date: July 1971

Purpose: Next spring the first pupils will have finished grade IX of the experimental comprehensive school and start the secondary stage in the following autumn. The purpose of the study is to find the proportion of pupils continuing their studies at this stage, their school success, etc.

Methods: The subjects are about 900 experimental comprehensive school pupils who have passed the upper level of the school. Methods: Statistics, mapping of problems, comparison of means.

D.6 *Peruskoulun opetussuunnitelman äidinkielenopetuksen tavoiteanalyysi* (Analysis of the objectives of mother tongue instruction in the comprehensive school curriculum)

Researcher: L. KOPPINEN

Purpose: Differentiation of the objectives of mother tongue instruction in the comprehensive school; presentation of a theoretical goal hierarchy for further investigations. At a later stage of the study groups of goal definers are chosen.

Method: A questionnaire designed on the basis of theoretical goals employed in gathering material. A pilot study (N=200) to establish the usability of the questionnaire and correcting its defects.

D.7 *Eräiden muuttujien yhteydet englannin kielen oppimiseen kokeiluperuskoulujen IV luokalla* (Relations of some factors to the learning of English in grade IV of the experimental comprehensive school)

Researcher: S. TAKALA

Probable completion date: Spring 1971

Purpose: The purpose is to study the relations of some factors such as general intelligence, type of class, size of teaching unit, etc, to the learning results of English in grade IV of the experimental comprehensive school, and the correlations between different language skills.

Methods: The subjects are about 1,000 IV-grade pupils at the experimental comprehensive school. Some measuring instruments are of the multiple-choice type (tests in listening comprehension, reading comprehension, and grammatical structures), others are based on teacher rating (answering to questions, conversation). The main methods are analysis of group differences, correlation and factor analysis.

D.8 *Syntaktinen analyysi 9-vuotiaitten kielestä* (A syntax analysis of the language of 9-year-olds)

Researcher: L. KOPPINEN

Starting date: December 1970

Purpose: A syntax analysis of the use of language of 9-year-olds for the basis of research on curriculum and teaching material.

Method: A syntax analysis of the free compositions written by III-grade comprehensive school pupils (N=1500).

D.9 *Viisipäiväiseen kouluviikkoon siirtyminen* (Transition to the five-day school week)

Researcher: P. PIHANEN

Starting date: September 1970

Probable completion date: End of 1970

Purpose: To discover whether those under the direct influence of school work - pupils, teachers, parents and school authorities - consider it necessary to follow the general tendency in working life to adopt the five-day week. The present study is mapping, and forms a part of another, more comprehensive investigation on the reorganisation of school working hours.

Methods: For the requirements of mapping, the study involves 1,600 teachers, 3,000 pupils, 4,000 parents (guardians), and about 800 school authorities. Sub-groups are formed within each main group according to type of school and geographical position, and, for pupils, teachers and parents, also according to social class or home district.

D.10 *Opetustutkimus 1969* (Study on teaching 1969)

Researcher: M. RENKO

Starting date: September 1969

Probable completion date: June 1971

Purpose: The study is based on previous investigations and theory, and is focused on the relations of teachers' personality traits and teaching techniques to pupils' personality traits and school achievements.

Methods: The subjects are 900 II-grade pupils and their teachers, and 900 IV-grade pupils and their teachers (30) at the primary school in Central Finnish municipalities and boroughs. Measuring instruments - teachers: personality, rating in the teaching situation (Ryans), teaching techniques, observation (Stukát-Engström) and registration (grade IV only); background (data from the teacher register). Measuring instruments - pupils: personality, Ylinentalo inventory; school achievements, LUKILA tests and a specific measure for teaching matter (grade IV only).

D.11 *Opetustavoitteet ja evaluointi opetustapahtumassa* (Evaluation and the aims of instruction in the teaching process)

Researcher: R. ALA-KURIKKA

Starting date: Autumn 1969

Probable completion date: Spring 1971

Purpose: The theoretical frame of reference of the study is the combination of the aims of instruction and evaluation of learning results with the elements of the teaching process. The effects of these factors on teacher-pupil interaction and learning results are studied by the method of feedback.

Method: An experimental research design with 200 III-grade primary school pupils.

D.12 *Opetusmateriaalien affektiiviset vaikutukset oppilaiden persoonallisuuden piirteiden muodostamassa viitekehyksessä* (The affective effects of teaching material in the frame of reference of pupils' personality traits)

Researcher: J. KARI

Starting date: August 1970

Purpose: To map the affective effects of some of the present visual and auditive teaching material on the individual and social objectives of the comprehensive school in the framework of pupils' personality traits.

Methods: Multivariate analyses.

D.13 *Oppilaiden persoonallisuuden kehityksen tasapainoisuuden mittaaminen persoonallisuusinventaarioita käyttämällä* (Measurement of the balance of pupils' personality development by means of personality inventories)

Researcher: O. YLINENTALO

Starting date: Autumn 1969

Probable completion date: Autumn 1971

Purpose: To find out how personality inventories can be used to measure the balance of personality development, how reliable this is, and how accurate estimations can be obtained by teachers' trait ratings.

Methods: The subjects are about 1,200 IV to VIII-grade primary school pupils. The objects of analysis were pupils' scores for the different personality scales (KTL II), and teachers' ratings of pupils' personality development. Regression analysis is employed to find for each personality scale such loadings as can be used to obtain multiple correlations with the criterion.

D.14 *Persoonallisuusinventaarioiden avulla todettujen ominaisuuksien suhde opettajien ja lasten vanhempien suorittamiin piirrearviointeihin* (Relation of characteristics obtained by means of personality inventories to trait ratings by teachers and parents)

Researcher: O. YLINENTALO

Starting date: Autumn 1968

Probable completion date: Spring 1971

Purpose: To study, by using four different methods, the correspondence between pupils' scores on various personality scales (KTK I) and teacher and parent ratings of the corresponding traits.

Methods: The subjects are about 600 primary school pupils in grades I-III. Material was gathered in Central Finnish schools. Relationship between scale scores and trait ratings is studied on the basis of first and second order factor structures. The way in which correspondence is dependent on the amount of faulty measurement and some factors influencing rating material is investigated separately for each method. Another object of study is correspondence between teacher and parent ratings.

D.15 *Kielen ja kommunikaation vaatimien psykologisten edellytysten kehittyminen esikouluiässä ja sen jälkeen* (Development of the psychological prerequisites for communication at and after pre-school age)

Researchers: J. KUUSINEN (Project leader), M. KUUSINEN

Starting date: January 1969

Purpose: The Illinois Test of Psycholinguistic Abilities based on the communication model of Osgood; preparation of tests for Finland.

Methods: Methods available for the preparation and standardisation of ability tests. The number of children studied so far is 450, aged $3\frac{1}{2}$ to $9\frac{1}{2}$. School or institution: kindergarten, primary school.

D.16 *Lukutaidon rakenne ja sen kehittyminen sekä yhteydet koulumenestykseen lukuaineissa peruskoulun II-VI luokilla* (The structure of reading ability; development and relations to school success in academic subjects in grades II-VI of the comprehensive school)

Researcher: J. KARVONEN

Purpose: An analytical study on reading ability and its development at the comprehensive school level, aimed to find out to what extent the different components of reading ability account for the variance of learning academic subjects at this level. - Sub-project of the research programme on linguistic development and language learning co-ordinated by the Institute for Educational Research.

Methods: A set of measures for reading ability, and objective school tests and teachers' marks for measuring the results of school learning. N=600.

D.17 *Luku- ja kirjoitushäiriöisten oppilaiden lukemisen ja kirjoituksen virheiden rakenne sekä virheiden yhteydet eräisiin kognitiivisen kehitystason muuttujiin* (The structure of the reading and writing errors of pupils with reading and writing disturbances; relations of these errors to some variables for the level of cognitive development)

Researchers: I. RUOPPILA (Project leader), M. VÄSTI

Starting date: 1969

Probable completion date: 1970

Purpose: As title. Subjects are pupils in grade II of the comprehensive school.

Method: KTL diagnostic reading and writing tests; KTK performance tests; some perception tests.

D.18 *KTL:n diagnostisia kirjoituskokeita peruskoulun IV luokalle. Kokeiden standardointi ja kirjoitusvirheiden faktorianalyyttinen tutkimus* (KTL diagnostic writing tests for grade IV of the comprehensive school. Standardisation of tests and a factor analytical study of writing errors)

Researchers: I. RUOPPILA (Project leader), K. RÖMAN, M. VÄSTI

Starting date: 1970

Probable completion date: 1971

Purpose: Standardisation of a dictation test for grade IV of the comprehensive school, and a factor analytical study of writing errors.

Methods: Four story and two word tests designed by the authors.

D.19 *Oppikoululaisten vapaa-ajan fyysinen aktiivisuus ja liikuntaharrastukset. Mittaamismenetelmän kehittely ja liikuntakäyttäytymisen selitysyhteyksien analysointi* (Physical activity and sports interests of secondary school pupils. Construction of a method of measurement, analysis of the relations of physical activity)

Researcher: R. TELAMA

Starting date: January 1969

Probable completion date: January 1971

Purpose: To design a questionnaire for the measurement of physical activity;
- to study the factor structure of physical activity and sports interests;
- to analyse and describe the relations of physical activity and sports interests of secondary school pupils.

Methods: Experimental design with explanatory mapping. Measurement by questionnaires answered personally. Analyses of variance, regression, factor, transformation.

D.20 *Koulupoikien fyysinen kunto ja sen yhteydet liikunnanopetuksen pedagogisiin ja ympäristötekijöihin* (Physical fitness of schoolboys; its relations to the pedagogical and environmental factors of physical education)

Researchers: J. KIRJONEN, L. LAAKSO, J. LAITINEN

Starting date: 1969

Probable completion date: End of 1971

Purpose: To co-ordinate the information obtained earlier through studies on the norms of physical fitness on the same material. This information concerns the physical and pedagogic-instrumental facilities of physical education teachers' professional training, their interest in the field, and the size of locality and school. If connections can be found between physical fitness and background factors, the information obtained is to be applied for the purposes of further investigations and curricula.

Methods: A descriptive empirical study also aimed at conclusions concerning interrelations of groups of phenomena. Statistical-mathematical methods.

D.21 *Liikenneopetukseen liittyvän käsitteistön opettaminen ja sen yhteydet eräisiin oppimista ja käsitteiden oppimista mittaaviin muuttujiin* (Teaching of concepts in traffic instructions; relations to some factors measuring learning and concept learning)

Researcher: A. LAHTINEN

Starting date: 1970

Probable completion date: 1971

Purpose: The learning of basic concepts in each school subject is the foundation of learning new material. The study is aimed to show how the quality of stimulus material and various strategies of concept formation affect learning efficiency in measuring pupils' knowledge of traffic questions. The frame of reference in target analysis and measurement is the Bloom taxonomy of educational goals.

Methods: Experimental design: Teaching of concepts in various ways; Measurement of learning results; Traffic instruction; Measurement of learning results. The methods used in analysis of results are testing of mean scores and variance analysis. The subjects are III-grade pupils of the comprehensive school; N=100 in preliminary tests, N=200 in final tests.

D.22 *Matematiikan erityisopetuksen kehittämisprojekti* (Development project on special mathematics instruction)

Researchers: J. PURO, M-L. ÅSTRÖM

Starting date: September 1970

Probable completion date: January 1972

Purpose: Mapping of the need for special mathematics instruction. - Analysis of the objectives of mathematics instruction in view of the curricula for special classes. - Clinical experiment on special mathematics instruction with suitable material and methods for teaching problematic points.

Methods: Questionnaires, content analysis, experiment.

D.23 *IEA:n kansainvälinen koulusaavutustutkimus* (International Study on Educational Achievement) (International Association for the Evaluation of Educational Achievement, IEA)
Phase II: A study of six subject areas

Researcher: K. LEIMU (Co-ordinator for Finland)

Starting date: 1966-68 (Stage I); 1968-70 (Stage II); 1970-73 (Stage III)

Probable completion date: 1973

Purpose: An international survey of comparative education, aiming to study the relationships between relevant input factors in the social, economic and pedagogic realm and output as measured by performance on international tests measuring both cognitive and non-cognitive outcomes. These relationships are studied in a number (*ca* 20) of educational systems simultaneously. Phase II is a study of six subject areas including science, reading comprehension and literature, English as a foreign language, civics education and French as a foreign language (not in Finland). There are four target populations, ranging from 10-year-olds to the pre-university grade. In Finland, some 250 schools are involved in Stage II and about 150 in Stage III.

Methods: An international survey-type study, based on a two-stage stratified probability sampling with uniform principles in each of the participating countries. The analysis of data examines the variation between schools within countries and between countries respectively. Multivariate analysis techniques are used with replication of data from all the participating countries.

D.24 *Ylioppilaiden aikaisempi kielitaito ja yliopistossa käytettävien englanninkielen opetusmenetelmien tulokset* (University students' previous knowledge of foreign languages; results of the methods of teaching English in university instruction)

Researchers: J. KARVONEN, R. KONTTINEN, (J. STRATTON)

Probable completion date: Phase I completed in 1969

Purpose: To find out what kind of results are achieved by the different methods of teaching English in university instruction for students who do not have English in their combination of subjects. The two methods under study are the traditional *pro exercitio* course and a partly programmed method with printed material and language laboratory.

Methods: A set of measures for linguistic ability; a set of measures for the knowledge of English; attitude measure. - The first phase of the study consisted of preliminary measurements by a complex set of measures for linguistic abilities, division of subjects into two groups, and teaching each group for one term. The courses are followed by final measurements and the analysis of results.

D.25 *Opettajien asenteet, odotukset ja oppimistulokset jatkokoulutuksessa* (Teachers' attitudes, expectations and learning results in further training)

Researchers: J. KARVONEN, R. TELAMA

Probable completion date: 1970-71

Purpose: To study the attitudes of primary school and secondary school teachers towards further education, the expectations they impose on the training programme, and the changes in their attitudes during further training. In addition, the relations of attitudes to learning results during further training are dealt with.

Methods: Longitudinal study. Attitudes etc measured at the beginning of the course, with a second measurement at the end of it. Learning results measured by means of an objective measure of knowledge (repetitive examination) after the course was finished. Phase I concerns the radio and TV course on comprehensive school pedagogics in 1968-69. The subjects are about 1,600 teachers participating in the course, and the control group is a sample of primary school teachers who did not participate.

D.26 *Hallinnonuudistustutkimus* (Revision of university administration)

Researchers: M. MARIN (Project leader), H. JALKANEN, J. LILLBERG and P. MÄÄTTÄ (Research assistants)

Starting date: October 1970

Purpose: To study the effects of the revision of the administrative systems of universities, and the explicit/implicit values within existing and planned administration models.

Methods: Questionnaires, interviews, existing statistical data, committee memoranda, newspaper articles, etc.

Name of institute: HELSINGIN YLIOPISTON KASVATUSTIETEEN LAITOS (Department of Education, University of Helsinki)

Address: Snellmaninkatu 10 A, Helsinki 17

Director: Professor Matti Koskenniemi, DrEd

A. HISTORICAL

Year of foundation: 1955.

The establishment of the Department was a result of increasing number of students.

B. STATUS AND PROGRAMME

1. The Department is affiliated to the Faculty of Philosophy (Section of the Humanities) of the University of Helsinki.

2. The Department has a representative body of five teachers and five students, which is so far an advisory organ.

3. Staff in 1970

	Full-time	Part-time
Total	33	17
Teaching and research staff	25	13
Researchers	1	-

4. Budget

1970	700,000 FMK (+ maintenance of buildings)

The main source of finance is the University of Helsinki, and through it the State.

5. The Department trains some 250 teachers each year, and runs three summer universities.

6. Main fields of interest: instructional process, teacher education, history of education and secondary education.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Lukiotutkimus* (The Finnish Senior Secondary Research Project)

Researchers: A-L. SYSIHARJU and assistants

Duration of study: Initiated in the school year 1964-65, to be continued at least till 1971-72

Purpose: To examine the present function of the Finnish school system as regards the age group 16-20 (especially senior secondary stage), in view of reform. - To study interaction between educational careers (choices, achievement, etc) and social factors (sex, regional, social and family background, social relations). - To analyse individual differences in the development and reactions of Finnish youth in the latter 1960s.

Methods: A longitudinal project started with a cohort of 1435 (officially) IX-grade pupils in 1964-65, followed annually by means of personal questionnaires presented at school or mailed individually, by gathering achievement data directly from schools, administering some vocational guidance tests, collecting teacher and peer ratings, and asking for some free essays. The mass of data is continually being analysed in various ways.

References:

16 publications since 1966, mostly in Finnish; of these 7 published 1969-70, including:

Sysiharju, A-L. *The Way Into and Through* Gymnas *in the Scandinavian Countries. A Comparative Discussion* in Sandven, J. and Sysiharju, A-L. (Eds) *Veien til og gjennom gymnaset i de nordiske land.* Oslo 1967, 103-117.

Sysiharju, A-L. *Social Factors in the Recruitment to the* Gymnasium *in Finland.* Scandinavian Journal of Educational Research 1969, 13, 69-102.

Sysiharju, A-L. *Motivuntersuchungen zur Wahl des Schulweges. Pädagogische Rundschau* 1970, 24, 399-409.

C.2 *Helsinki - Turku project. Student teaching experiences. An analysis of factors related to success in student teaching, and change of attitudes and expectations during that period*

Researchers: J. ALIKOSKI (Project leader), J. HYTÖNEN, S. KONTIAINEN

Duration of study: Initiated in autumn 1966. Published in several separate reports.

Purpose: The project covers several related problems. The aim is to study the realisation of and changes in students' expectations related to success in student teaching, changes in their educational attitudes during this period, expectations concerning the work of supervising teachers, and factors related to the process of giving marks in teaching ability. Main emphasis is laid on instructor-student interaction and on the development of the need-orientated attitude and estimation measures serving this interaction.

Methods: Attitude (eg MTAI, Teacher Preference Schedules G,A) and expectation questionnaires at different phases of the student teaching period, various rating blanks at the end of the period, marks in teaching ability, and several personality and aptitude tests. General educational attitude responses and estimations of each other's behaviour obtained individually by using the same need logics for instructors and student teachers.

Conclusions: Alikoski, Interim Report: Requirements for the teaching of music, physical education, handwork and art are divergent from each other, and also from the "academic" subjects. These differences in teaching make the construction of teachers' subject combination more difficult.

Hytönen, Interim Report: The instructors were qualified enough to estimate student teachers' behaviour on four dimensions, the main factors being careful preparation and keeping to the plan on one hand, and flexibility and yielding to the teaching situation on the other.

References:

Alikoski, J. *Opetustaidon ainesidonnaisuudesta. Ohjaajien antamiin opetustaidon arvosanoihin ja opettajakokelaiden ainepreferensseihin nojaava empiirinen tarkastelu.* (The clustering of school subjects according to teachability. An empirical investigation on the basis of marks in teaching ability and on the preferences of student teachers.) Bulletin No. 4/1969, Department of Education, University of Helsinki, 249 p.

Hytönen, J. *Opettajakokelaiden opetusharjoittelukäyttäytymisen arvioimisesta. Lukuaineiden lehtoreiden käsityksiin perustuva empiirinen tarkastelu.* (Rating of behaviour of student teachers.) Bulletin No. 10/1970, Department of Education, University of Helsinki, 169 p.

C.3 *Suomenkielisiin kansakoulunopettajaseminaareihin pyrkijät ja seminaarien oppilaiden valinta* (The recruitment and selection of students for teacher training in Finland)

Researcher: J. JUSSILA

Duration of study: 7 years

Purpose: To study whether there are differences in the background of applicants to various teacher training schools; - To find out how the selection procedures determine the choice, and whether differences occur in such practices between various teacher training schools; - To compare the emphasis laid by different schools on the various items of the entrance examination in the selection of applicants.

Methods: Material was gathered through documents sent in by applicants, questionnaires and results in the entrance examination.

Conclusions: The background factors of applicants to various teacher training schools varied only slightly; greatest differences were related to the degree of industrialisation of the home district, and distance from school. The selection practices of various schools differed widely, due to the different emphasis in selection on the items of the entrance examination.

Reference:

Jussila, J. *Suomenkielisiin kansakoulunopettajaseminaareihin pyrkijät ja seminaarien oppilaiden valinta.* Research Report No. 12/1970, Department of Education, University of Helsinki.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Didaktinen prosessianalyysi* (Investigations into the instructional process)

Researchers: M. KOSKENNIEMI (Project leader), A-K. FALCK, P. HOLOPAINEN, E. KOMULAINEN

Duration of study: Filming of teaching situations started at the beginning of the autumn term 1967; theoretical foundation laid several years earlier; to be continued; interim reports published in the course of study.

Purpose: To make a thorough study of the structure and dynamics of the instructional process, to analyse and develop suitable observation techniques, and, by using these, to study the structure and functional relations of the didactic process.

Method: Follow-up studies in periods of two years. The work of one class is observed by means of closed-circuit TV and other measurements.

D.2 *Eräiden selektiomuuttujien yhteydestä seminaarin päästötodistuksen keskiarvoon ja opetustaidon arvosanaan* (The relationship between some selection variables and the final report marks in teacher training schools in Finland)

Researcher: J. JUSSILA

Starting date: Autumn 1970

Probable completion date: 1971

Purpose: To find out how well certain selection variables can predict success in teacher training.

Methods: Material gathered from documents sent in by applicants, questionnaires, results in the entrance examination, and final certificates. Regression analysis.

D.3 *Kouluhallituksen vaiheita vuosisataistaipaleelta 1869/1969* (The Finnish National Board of Schools, 1869 to 1969)

Researchers: S-L. HEIMALA, H. KAUHANEN, K. NURMI, I. SALMÉN, J. SUOMI

Starting date: October 1968

Probable completion date: End of 1970

Purpose: Chronicle of the activities of the National Board of Schools during the century.

Method: Study of archives, comparison of results with published literature which is incoherent.

Name of institute: PEDAGOGISKA INSTITUTIONEN VID ÅBO AKADEMI
(Institute of Education, Academy of Åbo)

Address: Vårdbersgatan 1 A, Åbo

Director: Matti A. Sainio, DrPh, Professor

A. HISTORICAL

Year of foundation: 1966-67.

The Institute was established on the initiative of Gunnar Stadius and Matti A. Sainio.

B. STATUS AND PROGRAMME

The Institute is affiliated to the Academy of Åbo.

Staff in 1970: 2 full-time and 4 part-time persons in teaching and research.

The main source of finance is Åbo Academy.

The Institute participates in the general educational training of teachers and researchers.

Instruction is supervised by the Faculty of Humanities on the basis of established courses, and focused on general education.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Effekter av bakgrund, intelligens och tidigare betyg på slutresultat i statsläroverk i Åbo* (Effects of social background, intelligence and earlier school marks on final results in state secondary schools in Turku)

Researcher: K. WIKSTRÖM

Duration of study: Primary intelligence tests were carried out 1950-51. Subjects' school success was then followed, and the investigation was completed in 1969.

Purpose: Prognosis of school achievement. - Providing a basis for career follow-up.

Method: Individual test IQs (Terman-Merrill) were collected for 144 pupils in four state secondary schools (2 for boys, 2 for girls) in Turku. 81 were from grade I (11-12 years), 63 from grade V (15-17 years). Subsequent school achievement was recorded longitudinally.

Conclusions: Girls had higher mean grades and were more seldom held back than boys. For girls this took place later and led more often to dropping out. The results of boys and girls in the matriculation examination did not differ. Few pupils came from lower occupational strata, and the strata did not differ significantly in IQ or school marks. Pupils from lower strata more often discontinued their studies after the junior secondary. Mark averages from the junior secondary predicted school achievement at higher stages better than IQ. Correlations between mark averages at lower and higher stages varied between 0.50 and 0.70. Results in the national matriculation exmmination correlated in the 0.50-0.85 range with IQ and school marks given 8 to 9 years earlier.

Reference:

Wikström, K. *Effekter av bakgrund intelligens och tidigare betyg på slutresultat i statsläroverk i Åbo.* Reports from the Institute of Educational Psychology No. 8, Åbo Akademi, 1969.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *En uppföljning av tidigare läroverkselever med hänsyn till deras senare utbilning samhällsställning och attityder till skolan* (Career follow-up of earlier secondary school pupils, regarding their later vocational training, social position and attitudes to school)

Researcher: K. WIKSTRÖM

Starting date: 1969

Probable completion date: 1970

Purpose: To study the influence of sex, social background, IQ and school records on later career and attitudes to school.

Method: Questionnaires were sent to pupils tested nearly 20 years previously.

Name of institute: JYVÄSKYLÄN YLIOISTON KASVATUSTIETEEN LAITOS
(Institute of Education, University of Jyväskylä)

Address: University of Jyväskylä, Jyväskylä

Director: Post vacant

Vice-Director: Professor Annika Takala

A. HISTORICAL

Year of foundation: 1934.

The Institute was founded on the initiative of the Teachers' College of Jyväskylä, to promote the development of teacher training.

B. STATUS AND PROGRAMME

The Institute is affiliated to the Faculty of Education and Social Sciences of the University of Jyväskylä.

Staff in 1970: University teachers (full-time): 10.

Budget in 1970: 360,000 FMK.

Most of the research work of the Institute is done in co-operation with the Institute for Educational Research, whose report also includes the main fields of research activity of the Institute, research projects reported in 1969-70, and research projects in progress.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *A descriptive model of aggression and non-aggression*

Researcher: L. PITKÄNEN

Duration of study: 3 years

Purpose: Construction and testing of a descriptive model for inter-individual differences in aggressive and non-aggressive behaviour.
Part I: Human aggressive behaviour, theoretical frame of reference consisting of an integration of different theoretical approaches, main emphasis on learning theories.
Part II: Integration of findings on aggression, a more general description of individual patterns of behaviour in situations generally instigating aggression. Aggression in different forms understood as only one of the alternative patterns of coping with noxious situations.
Part III: Comparison of six extreme groups to obtain further information on inter-individual differences in aggressive and non-aggressive behaviour.

Methods: Part I: Teacher rating in kindergartens.
Part II: Peer rating modified from the Guess-who technique, teacher rating and two personality inventories (Junior Eysenk Personality Inventory and Personality Inventory for the Lower Forms of the Primary School). Subjects: II-grade pupils of the primary school.
Part III: Three question series designed by the investigator presented to the subjects, to find out individual solutions to thwarting situations.

Reference:

Pitkänen, L. *A descriptive model of aggression and non-aggression with applications to children's behaviour.* Jyväskylä Studies in Education, Psychology and Social Research 19, University of Jyväskylä 1969.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Tarkoitusselityksistä kasvatustieteessä* (Finalistic explanations in educational science)

Researcher: K. KIVISTÖ

Starting date: 1969

Probable completion date: End of 1970

Purpose: To study the possible applications of finalistic explanations in the study of the process of education.

Method: Concept analysis.

D.2 *Koulutuspalvelujen leviäminen* (Diffusion of schooling)

Researcher: K. KIVISTÖ

Starting date: January 1971

Probable completion date: July 1972

Purpose: To study the nature of the mechanism that has led to a regionally uneven distribution of schooling.

Method: Statistical analysis.

D.3 *Kodin kasvuärsykkeiden yhteys kansakoululaisten ainekirjoituksen tasoon* (Relation of home stimuli to primary school pupils' free writing)

Researcher: J. EKOLA

Starting date: Spring 1969

Probable completion date: December 1970

Purpose: To find clusters of stimuli in the home environment of primary school pupils which account significantly for the variables describing the level of free writing.

Method: A descriptive study: information on home background gathered by questionnaires. Variables for free writing analysed on the basis of essays written for the purpose of this investigation.

Name of institute: OULUN YLIOPISTON KASVATUSTIETEEN LAITOS
(Institute of Education, University of Oulu)

Address: Kasarmintie 4, Oulu

Director: Professor O.K. Kyöstiö

A. HISTORICAL

Year of foundation: 1964.

Established on the initiative of the University of Oulu for the promotion of educational research and teacher training.

B. STATUS AND PROGRAMME

The Institute is affiliated to the Teachers' College and the Faculty of Philosophy of the University of Oulu.

Staff in 1970

	Full-time	Part-time
Total	10	-
Teaching and research staff	8	-

Budget

1968	130,000 FMK
1969	180,000 FMK
1970	220,000 FMK

Main source of finance: University of Oulu

The Institute, being closely affiliated to the Teachers' College, organises all instruction in education aimed at academic degrees both at the initial and further training stage. It takes charge of the training of educational research workers in Northern Finland by offering instruction at all levels for the MA degree, as well as licenciate level instruction.

Main fields of interest: Educational, primarily empirical research by modern methods, concerning the comprehensive school and its teachers, and the special schooling conditions of Northern Finland.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Yhteiskasvatustutkimus* (Attainment in co-educational and segregated schools)

Researcher: O.K. KYÖSTIÖ

Duration of study: 6 years

Purpose: To study the effect of the type of school on school success.

Method: *Ex post facto,* follow-up study.

Conclusions: The type of school has no marked effect on school success. The secondary school entrance examination does not predict very well pupils' success in the matriculation examination.

Reference:

Kyöstiö, O.K. *Attainment in co-educational and segregated schools. Pedagogisk Forskning* No. 3, 1970, 113-71.

C.2 *Pohjakoulutustaso ja kansakoulunopettajan kehitysympäristöjen muodostuminen* (The level of basic education in relation to the formation of the development milieux of primary school teachers)

Researcher: E. VILJANEN

Duration of study: 3 years

Purpose: To study how the differences in basic education (primary or middle school, matriculation examination) have limited the formation of the historical and actual development milieux of the present primary school teacher with a class-teacher education.

Method: Material gathered by postal questionnaires. N=1640. Systematical sampling. Results analysed by level-type (Chi-square, t-test) and structural (correlation, factor and transformation analysis) methods.

Conclusions: Teachers with a primary or middle school basic education have met more limitations in the formation of development milieux than those with a matriculation examination. The limitations are more apparent in female than male teachers. The level of basic education limits the formation of the actual development milieux of male teachers more in younger than in older age groups, and differences between the sexes are manifested both in variable and factor comparisons. Male teachers with the same basic education are more coherent than female teachers. The social and physical stimulus conditions have been more favourable for matriculated teachers than for those with the lower basic education.

Reference:

Viljanen, E. *Pohjakoulutustaso ja kansakoulunopettajan kehitysympäristöjen muodostuminen.* Jyväskylä Studies in Education, Psychology and Educational Research 22/1970.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Pohjois-Suomen kehitystutkimus* (Development of basic school pupils in 1970-79)

Researchers: O.K. KYÖSTIÖ, M. JUSSILA, T. VAHERVA, and students for test administration

Starting date: September 1969

Probable completion date: End of 1979

Purpose: To compare the psychological and physical features and schooling possibilities of Northern and Southern Finnish comprehensive school pupils during their studies at this school.

Method: Follow-up.

D.2 *Kansakoulunopettajien suuntautuminen peruskoulun opettajantehtäviin* (Primary school teachers and the comprehensive school)

Researcher: E. VILJANEN

Starting date: 1967

Purpose: To study how the primary school teachers now in office estimate their need for further training, and what kind of expectations they have of it when entering the comprehensive school.

Method: Material gathered by questionnaires.

D.3 *Maantieteen tietoaineksen säilyvyydestä ja siihen vaikuttavista tekijöistä oppikoulutasolla* (Stability of pupils' knowledge of geography, and factors influencing it at the secondary school level)

Researcher: M. JUSSILA

Starting date: Gathering of material: 1962, 1963, 1964

Probable completion date: 1971

Purpose: To study the stability of knowledge obtained at school and the effect on it of various factors.

Method: Testing of mean differences, variance analysis.

D.4 *Suljetun piirin television käyttömahdollisuudet korkeammassa opetuksessa* (The use of closed-circuit television in higher education)

Researchers: T. VAHERVA, E. SAARI, K. KARPPINEN

Starting date: August 1970

Probable completion date: October 1971

Purpose: To study the possibilities of using closed-circuit television and other necessary technical equipment in higher (university-level) education.

Methods: Goal and method analysis; experiments with available CCTV installations.

Name of institute: TAMPEREEN YLIOPISTON KASVATUSTIETEEN LAITOS
(Institute of Education, University of Tampere)

Address: Kalevantie 4, Tampere

Director: Väinö Heikkinen, PhD, Professor of Education

A. HISTORICAL

Year of foundation: 1965.

B. STATUS AND PROGRAMME

The Institute is affiliated to the Faculty of Humanities of the University of Tampere.

Staff in 1970: 6 part-time and 6 full-time persons in teaching and research.

The budget is a part of that of the Faculty.

Originally the Institute was in no way involved in teacher training; now all secondary school teachers are required to pass the lowest examinaton in education. The Institute organises a licenciate seminar every second week and doctorial dissertations in education are supervised by the Institute.

Main fields of interest: educational attitudes, evaluation of pupils, instruction given by the University.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Korkeakouluopiskelijoiden keskeyttämishalukkuus* (Potential drop-out among university students)

Researcher: A. JÄRVINEN

Duration of study: Data collected during the autumn of 1967, investigation carried out between spring 1969 and September 1970

Purpose: To find out how those potential drop-outs who have chosen the field of study they wanted differ from those who have no such choice. Differences are viewed in relation to certain factors of career, studies and employment.

Method: Discriminate analysis of discrete data.

Conclusions: The motivational state at the beginning of studies is quite static; it only changes through the interaction of the factors of choice of career, studies and employment.

Reference:

Järvinen, A. *Korkeakouluopiskelijoiden keskeyttämishalukkuus.* Research Institute of the University of Tampere, Duplication Series A, 36, 1970. (An English summary will be published at the beginning of 1971.)

C.2 *Korkeakouluopiskelijoiden ensimmäisen vuoden opinto-käyttäytyminen* (Success, anxiety, contentment and expectations of first-year university students)

Researcher: A. KALLIOKOSKI

Duration of study: Data collected in autumn 1970; investigation carried out between spring 1969 and November 1970

Purpose: To study: the expectations of university students beginning their studies; - the changes in these expectations; - the success and contentment of students.

Methods: Various correlational methods.

Reference: An English summary of the study will be published at the beginning of 1971.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Oppilasarvostelun häiriöistä II* (Interference in marking, II)

Researcher: M. PELTONEN

Starting date: 1969

Purpose: Improvement of marking (continuation of doctoral dissertation).
Method: Experimental.

D.2 *Valinnan ongelmasta* (The problem of selection)

Researcher: M. PELTONEN

Starting date: 1970

Probable completion date: 1972

Purpose: To outline the problems of selection (eg selection of pupils) and to map the possibilities of solving them.

Methods: A theoretical approach; mathematical and statistical operations.

Name of institute: TAMPEREEN YLIOPISTON AIKUISKASVATUKSEN LAITOS
(Institute of Adult Education, University of Tampere)

Address: Kalevantie 4, Tampere

Director: Urpo Harva, Professor

A. HISTORICAL

Year of foundation: 1960.

For each subject area institutes were affiliated to corresponding professorships.

The Institute of Adult Education was established on the initiative of the University.

B. STATUS AND PROGRAMME

The Institute is part of the Faculty of Social Sciences of the University of Tampere.

An Institute Council consisting of four student representatives and three members representing the personnel of the Institute, has no officially established position in administration, unofficially the Council has directing, administrative and advisory duties.

Staff in 1970: 3 full-time and 2 part-time persons in teaching and research.

The Budget of the Institute is a part of that of the University.

The Institute offers first, second and third level degrees in adult education. The lowest degree is required for statutory positions in adult education. The Institute organises annually two to three further training seminars in adult education. The academic degrees in adult education require some familiarity with educational and behavioural-scientific research.

Although interested in all research into adult education, the Institute is primarily concerned at the moment with participation in, didactics of, and need for adult education.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Edistävä ja viihdyttävä opintokerhotoiminta* (Instrumental and expressive study circle activity)

Researcher: A. ALANEN

Duration of study: 7 years

Purpose: To study the instrumentality v. the expressiveness of study circle activity, and to compare the relations of these aims with study activity.

Methods: Survey, mailed questionnaires.

References:

Alanen, A. *Opintokerhotyön näköaloja* in *Acta Academic Socialis,* ser.B,3, Tampere 1963.

Alanen, A. *Edistävä ja viihdyttävä opintokerhotoiminta* in *Acta Universitatis Tamperensis,* ser.A, vol. 29, Tampere 1969.

C.2 *Kansankorkeakoulun opiskelijain sosiaalinen tausta ja opiskelun motivaatio* (The students at Finnish Folk Academies; social background and motivation of study)

Researcher: A. OKSANEN

Duration of study: 1 year

Purpose: To study the social background and the study motivation of students of Finnish Folk Academies.

Methods: Questionnaires to all students at Folk Academies in 1969-70 (N=1600). Questionnaires to a 25% sample (N=402).

Conclusions: The students at Folk Academies come mainly from the middle class, only 25% come from the lower class. Some 40% live in centres of population, and less than half in rural areas. 30% have finished the junior secondary school, and nearly 20% some vocational training. Swedish-speaking students come, on the average, from somewhat higher social classes than the Finnish-speaking students. Studies are aimed primarily at advancing the socio-economic status of the individual, for which he needs to improve his basic education.

Reference:

Oksanen, A. *Kansankorkeakoulun opiskelijain sosiaalinen tausta ja opiskelumotivaatio.* Duplication series of the Finnish Association for Folk Academies, 3/1970.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Opintokerhotutkimus* (A study on Study Circles)

Researcher: A. ALANEN

Starting date: January 1970

Probable completion date: 1971

Purpose: To study the number of Study Circles, and the characteristics, aims and teaching methods of instructors and students.

Methods: Survey, postal questionnaires.

D.2 *Kansanopistonopettajan työ* (The work of Folk Academy teachers)

Researcher: A. OKSANEN

Starting date: October 1970

Probable completion date: 1972

Purpose: To study the work load of Folk Academy teachers, and the way it varies between different subjects and teachers at different academies.

Method: Questionnaire.

D.3 *Aikuisten opiskelu ja koulutustarve Suomessa* (Studies and educational needs of adults in Finland)

Researcher: K. RANTALAIHO

Starting date: January 1970

Probable completion date: 1971

Purpose: To study the quality and quantity of the studies of adult Finns, and to explain the variance of these variables on the basis of age, sex, marital status, education, profession, place of residence, etc.

Methods: Survey, postal questionnaires.

D.4 *Kansalais- ja työväenopistojen opetusaineet 1899-1970* (Subjects taught at Workers' and Citizens' Institutes 1899-1970)

Researcher: E. KARJALAINEN

Starting date: Autumn 1969

Probable completion date: Autumn 1971

Purpose: To study the changing trends in the division of subjects taught at Workers' and Citizens' Institutes and to compare dialectically the correspondence between the duties and teaching programmes of the Institutes.

Method: Analysis of a large mass of statistical data gathered from the archives of the National Board of Schools, according to certain background variables.

Name of institute: TURUN YLIOPISTON KASVATUSTIETEEN LAITOS
(Institute of Education, University of Turku)

Address: Turku 2

Director: Inkeri Vikainen, Professor

A. HISTORICAL

Year of foundation: 1957.

The Institute was established on the initiative of the University to meet the need for empirical research.

B. STATUS AND PROGRAMME

The Institute is affiliated to the Faculty of Social Sciences of the University of Turku.

Staff in 1970: 4 full-time and 2 part-time persons in teaching and research.

Budget:	1968	9,700 FMK	(salaries excluded)
	1969	9,600 FMK	(" ")
	1970	18,500 FMK	(" ")

Main source of finance: University of Turku.

Main fields of interest: didactics, teachers' research.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Ääneen ja ääneti lukemisen opetuksen suhteellinen tehokkuus. Eksperimentaalinen tutkimus* (The relative efficiency of instruction in reading aloud and silent reading)

Researcher: E. VIITANIEMI

Duration of study: 6 years

Purpose: To study to what extent III to V-grade primary school pupils benefit from instruction given in reading aloud and silent reading.

Methods: Preliminary test - period of instruction - final test with 2 or 3 test groups. Analysis of results by paired and covariance analysis. Criteria: 4 reading tests measuring reading comprehension, perception and speed.

Conclusions: Reading aloud proved the best method for grades III and V, measured by the aloud reading test; for grade IV the silent method suited better. - Silent reading speed was best improved in grade III by the mixed method, in other grades (with no mixed method) by silent reading. - The mixed and aloud methods were suitable for grade III, silent method for grade IV, and no differences occurred for grade V.

Reference:

Viitaniemi, E. *Viitaniemen lukutestit* (Viitaniemi reading tests) Otava, 1969.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Opettajat oppilaittensa käyttäytymisen vahvistajina* (Teachers as reinforcers of their pupils' behaviour)

Researcher: K. SARTES

Starting date: January 1969

Purpose: To construct a useful motivation system for pupils' study behaviour. Additional purpose: to reduce behaviour disorders in school.

Method: Experimental.

D.2 *Taloustiedon opetus oppikoulun kuudennella luokalla* (The teaching of economics in the X-grade)

Researcher: I. VIKAINEN

Starting date: 1967

Probable completion date: 1971

Purpose: To ascertain the sources, the factors and the gains in the teaching of economics.

Methods: School achievement tests, inquiries about the sources of information for 32 randomly selected classes. Inquiries to teachers. The effect of different factors investigated by cross-tabulation.

D.3 *Käsityönopetuksen muodon vaikutus III luokan oppilaaseen* (The influence of the form of handwork instruction on the III-grade primary school pupil)

Researcher: T. KANAOJA

Starting date: September 1970

Probable completion date: September 1971

Purpose: To compare the influence on pupils' dexterity, creativity and attitudes of "orthodox, technical", "periodical" (all pupils taught both 'boys' and 'girls' handwork in periods), and "modelling" (art and handwork combined) instruction.

Method: Empirical study.

D.4 *Peruskoulun oppilaiden menestymisen ennustaminen follow-up tutkimuksen avulla* (Prediction of comprehensive school pupils' school success by means of a follow-up study)

Researchers: J. PUHAKKA, L. HAKALA, A. LOUNAMAA

Starting date: 1965

Probable completion date: 1971

Purpose: To study the factors influencing school success at the upper comprehensive school by using 9 school achievement tests, 6 intelligence tests, 10 personality traits, 14 interest variable, 8 attitude measures, and 7 variables measuring the physical aspect. Criterion: mark average in academical subjects.

Methods: Linear regression analysis, discrimination analysis.

III. EDUCATIONAL RESEARCH PROJECTS CARRIED OUT BY ORGANISATIONS NOT PRIMARILY CONCERNED WITH EDUCATIONAL RESEARCH

Replies were received from the following:

1. The National Planning Office, Helsinki
2. The Planning Bureau of the National Board of Schools, Helsinki
3. The Organisation for Regional Planning in Central Finland, Jyväskylä
4. Ministry of Labour, Vocational Guidance Office, Helsinki

Name of organisation:	VALTAKUNNANSUUNNITTELUTOIMISTO (The National Planning Office)
Address:	Kaivokatu 6, Helsinki 10
Director:	Väinö Paavilainen, *kanslianeuvos* (honorary title given in Finland usually to the heads of government offices)

Project reported

Jatkokoulutuksen rakenteen alueittainen erilaisuus Suomessa vuonna 1967
(Regional differences in the structure of upper secondary education in Finland in 1967)

Researcher: J. LEHTINEN

Duration of study: About 2 years

Purpose: To determine: the sufficiency of the upper secondary facilities available in various economic regions of Finland, - the regional evenness of distribution of student places, - the main features of the structure of upper secondary education in each economic region, and - the effect that upper secondary education, as it was at the time of the survey, was likely to have on the country's stock of vocational skills (the number of persons with vocational training).

Methods: Comparisons were carried out in terms of percentage ratios, weighted averages and characteristics generally employed in location analyses (location quotients and coefficients of change).

Reference:

Lehtinen, J. *Jatkokoulutuksen rakenteen alueittainen erilaisuus Suomessa vuonna 1967.* Summary: Regional differences in the structure of upper secondary education in Finland in 1967. Publications of the National Planning Office A:23.

Project in progress

Toisen asteen koulutuksen lokalisaatioperusteet (The bases of localisation of upper secondary education)

Researcher: J. LEHTINEN

Starting date: March 1970

Probable completion date: 1971

Purpose: The purpose of the study is to make clear the bases of localisation of upper secondary education in regard to the demographic, economic, geographic, and political factors. The term 'upper secondary education' used in this study covers all kinds of schooling or training other than university-level education that follow the eight to nine-year basic education.

Method: Information on 271 municipalities in Finland will be treated by various multivariate analyses, principally regression analysis and factor analysis.

Name of organisation: KOULUHALLITUKSEN SUUNNITTELUTOIMISTO
(The Planning Bureau of the National Board of Schools)

Address: Eteläinen Esplanadikatu 16, Helsinki 13

Director: Liekki Lehtisalo, MA

Projects in progress

D.1 *Koululaisten työaikatutkimus -70* (A study on pupils' working hours 1970)

Researcher: T. HOLOPAINEN

Starting date: February 1970

Probable completion date: End of 1970

Purpose: To map the total working hours of secondary, primary and civic school pupils. The objects of study are the time spent on transport to and from school, homework and preparation for examinations, extra work caused by "conditions" (summer exams for poor pupils) and other additional studies during term time and summer vacation. The descriptive part will be followed by an analysis of factors influencing the time spent on homework.

Methods: The data were gathered by means of questionnaires delivered to primary school pupils' parents and to civic and secondary school pupils. Before answering the questions pupils recorded the number of hours they had devoted to homework during the week. N=1500, from four different localities.

D.2 *Koulusopeutumistutkimus (työnimi)* (A study on school adaptation)(preliminary title)

Researcher: M. SUONPERÄ

Starting date: December 1969

Probable completion date: July 1971

Purpose: To study how the pupils of schools that have been closed down adapt themselves to a new school environment. The class levels concerned are the lower and middle grades of the primary school.

Methods: Interviews and group tests with the II and V-grade pupils of 2000 primary schools closed down during 1969.

Name of organisation: KESKI-SUOMEN SEUTUKAAVALIITTO
(The Organisation for Regional Planning in Central Finland)

Address: Kauppakatu 22 A, Jyväskylä

Director: Heikki Toikka, MSc, Director of Regional Planning

Project reported

Keski-Suomen koulutussuunnitelma (Educational plan for Central Finland)

Researcher: M. KANKAINEN

Duration of study: 1½ years

Purpose: To map the present schooling situation and to provide development plans for the upper comprehensive school, secondary education and special education up to 1980.

Methods: Methods of regional educational planning.

Conclusions: It is necessary to increase considerably the capacity of vocational schools, commercial schools and colleges, agricultural schools, course-type vocational education, and the capacity of other types of secondary education.

References:

Keski-Suomen koulutussuunnitelma I: Nykytilanteen inventointi (Educational Plan for Central Finland I: Present situation) Publication of the Organisation for Regional Planning in Central Finland No. 5, Ser.B, June 1970.

Keski-Suomen koulutussuunnitelma II: Tavoitteellinen kehittämissuunnitelma (Educational Plan for Central Finland II: Development plan) Publication of the Organisation for Regional Planning in Central Finland, No. 6, Ser.B, June 1970.

Name of organisation: TYÖVOIMAMINISTERIÖN AMMATINVALINNANOHJAUSTOIMISTO
(Ministry of Labour, Vocational Guidance Office)

Address: Siltasaarenkatu 3 A 5, Helsinki 53

Director: Kaarlo Multimäki, MEd

Projects reported

C.1 *Ohjaukseen valikoituminen* (Selective participation in vocational guidance)

Researcher: K. MULTIMÄKI

Duration of study: 1½ to 2 years

Purpose: To study some social and motivational factors that are presumed to be present when pupils seek counselling.

Method: Questionnaire.

Reference:

Multimäki, K. *Ohjaukseen valikoituminen.* Mimeograph series of Vocational Guidance No. 15, Helsinki, 1968.

C.2 *Ammatinvalinnanohjauksen vaikutuksista* (Changes in attitudes during the guidance period)

Researchers: A. TAPANINEN, K. MULTIMÄKI

Duration of study: 3 years

Purpose: To study the effects of vocational guidance by comparing attitude results before and after guidance.

Reference:

Tapaninen, A. and Multimäki, K. *Ammatinvalinnanohjauksen vaikutuksista.* Mimeograph series of Vocational Guidance No. 19, Helsinki, 1969.

Project in progress

Nuorison ammatillinen suuntautuminen (Vocational orientation of young people in Finland)

Researchers: K. MULTIMÄKI, A. TAPANINEN

Starting date: 1967

Probable completion date: Part I 1970
Part II 1971

Purpose: To study the influence of environmental and other social factors on vocational orientation.

Method: Questionnaire.

I. EDUCATIONAL RESEARCH POLICY

A.1 Provision for stimulating educational research

The Department of Education makes financial provision for educational research and continues to give financial assistance to University departments, the Educational Research Centre at St. Patrick's Training College, the Linguistic Institute of Ireland and other organisations to aid specific research projects. The Department also gives subventions to teachers who attend University graduate courses directed to the training of educational researchers.

A.2 Planning and Finance

A Committee of the Department of Education assesses applications for aid, reviews the progress of grant-aided research projects and considers means for the dissemination of the results obtained.

Figures on the global national expenditure on educational research are at present not available.

B. Priorities

The Committee mentioned at A.2 proposes to define problems in Irish education and it is intended to frame and co-ordinate future programmes of short-term and long-term research into these problems.

C.1 Registers

The Department of Education and the Economic and Social Research Institute keep registers of research projects.

C.2 Availability of research information

Educational research projects undertaken in the Educational Research Centre at St. Patrick's Training College and at the Linguistic Institute of Ireland are conducted in association with the Department of Education. A condition of the award of a grant-in-aid to University departments and other organisations provides that a report on any research project so aided must be furnished to the Department before publication. Progress reports are also furnished by these bodies.

C.3 User needs

The Department, together with managerial and teaching bodies, is represented on a Steering Committee which monitors and supports a major project on the attitudes of post-primary teachers which is being carried out by the Economic and Social Research Institute with part financial support from the Department.

II. ACTIVITIES OF EDUCATIONAL RESEARCH INSTITUTES

Replies were received from the following:

1. University College, Dublin
2. Education Department, University College, Cork
3. School of Education, University of Dublin (Trinity College), Dublin
4. St. Patrick's College, Maynooth
5. Educational Research Centre, St. Patrick's College, Dublin

Name of institute: COLÁISTE OLLSCOILE ÁTHA CLIATH
(University College Dublin)

Address: Earlsfort Terrace, Dublin 2 (Administration)

A. HISTORICAL

The College had its origin in the Catholic University of Ireland founded in 1851 and was re-established as a Constituent College of the National University of Ireland under the Irish Universities Act 1908.

The original Catholic University of Ireland was endowed by popular subscription, to provide an opportunity for university education for Irish catholics. Under the later 1908 Act, the College became a non-denominational institution.

B. STATUS AND PROGRAMME

1. University College Dublin is a Constituent College of the National University of Ireland.

2. The College has a Governing Body consisting of 34 members. This Body formulates policy governing the College as a whole. Represented on this Body are:

The President of the College	1
The Government	4
The Senate of the National University of Ireland	3
The Academic Council	6
Graduates of University College Dublin	6
The Lord Mayor of Dublin	1
The Council of the County of Dublin	1
The General Council of County Councils	8
Co-opted	4
	34

3. The University College comprises ten academic faculties.

4. Staff (1969-70)

Academic staff		
Full-time	473	
Part-time	203	
Non-academic staff	937	1,613

5. Budgets (to 30th June in each year)

1968		£1,885,171	
	Agriculture	240,413	£2,125,584
1969		2,172,831	
	Agriculture	273,991	£2,446,822
1970		2,505,200	
	Agriculture	291,106	£2,796,306

The predominant source of finance is the national government.

6. Training of teachers: In the session 1969/70 a total of 413 postgraduate students registered for the Higher Diploma in Education course and a further 19 registered for the Diploma Course in Career Guidance.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

I. Department of Psychology, University College Dublin

C.I.1 *A socio-psychological investigation of a disadvantaged subculture and its implications for education*

C. GARVEY, M. CARNEY, J. CHAMBERLAIN, P. McGEE, P. QUINN

Starting date: June 1968

Completion date: October 1970

Purpose: The purpose of this project was to investigate the needs of a disadvantaged subculture with a view to a change in the educational provisions for such a subculture. (M.Psych.Sc. theses - grant from Department of Education)

Conclusions: The conclusions are in line with other studies of a similar character. Recommendations are being made to the appropriate Ministry.

C.I.2 *Sex differences in the evaluation of job aspects by working class adolescents in a vocational school*

M. E. MORAN

Duration of study: 1 year, 1969

Purpose: To ascertain whether sex differences are responsible for different motives in job selection. (M.Psych.Sc. thesis)

C.I.3 *Language and intellectual development in children with impaired hearing*

P. J. CONNELLAN, J. P. KEEGAN

Duration of study: 1 year, 1970

Purpose: To investigate the hypothesis that in the case of young people with varying degrees of hearing, a positive correlation between their degrees of hearing acuity and their performance IQ could be expected, on the assumption that hearing facilitates the acquisition of language which is vital to Intellectual Growth. (Project Dip. Psychology)

Conclusions: No significant correlation was found between hearing loss and intelligence, therefore, the deaf child is normal intellectually but with a serious handicap. To overcome this handicap so that verbal language would play the significant role it is understood to play in intellectual development, what the young deaf child needs mostly is verbal language.

C.I.4 *A study of social and personality characteristics of children of high verbal ability*

E. NEUMAN

Duration of study: 2 years, 1969-70

Purpose: To make a study of the intellectual talent of children of high verbal ability. (M.Psych.Sc. thesis)

Conclusions: This study presents evidence that in Ireland it is possible to identify a group of children who are superior on measures of intellectual ability and personality. It is important that further studies should be made of these children particularly from the points of view of discovering, understanding and fostering their talents, so that these resources are not lost to the nation.

C.I.5 *The structure and motivation of the student population of the Irish Universities*

M. NEVIN

Duration of study: 2 years, 1968-69

Purpose: See title. (M.Psych. thesis)

Conclusions: Finance is only one factor in university access, motivation and values being even more important. Parents' ambition and motivation are also an important factor, as well as social and economic class levels.

II. Department of Social Science, University College Dublin

C.II.1 *Choice of post-primary education*

S. WALSH

Duration of study: 2 years

No publication yet.

Purpose: To study the factors affecting utilisation of post-primary educational facilities in two rural areas.

Methods: Documentary research and interviews with parents.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

I. Education Department, University College Dublin

D.I.1 *Analysis of classroom interaction in Irish secondary schools*

S. O'HEGARTY

Number of research workers: 2

Starting date: March 1970

Probable completion date: March 1972

Purpose: To examine the kind and extent of verbal and nonverbal interaction as practised in Irish secondary schools and to see what relationships exist between interactional styles of teaching and the main cognitive activities that occur during the teaching-learning process. It is intended to apply the major research findings in the design of preservice and inservice teacher training programmes.

Methods: Classes given by secondary teachers to their own pupils are recorded in the Education Department's CCTV studio-classroom using remotely-controlled wall-mounted cameras. Interactional, instructional and statistical analyses are carried out on the video-taped lessons, and the analyses are supplemented by surveys of teacher attitudes to various topics and by the judgments of advisory committees of teachers and subject specialists.

II. Department of Social Science, University College Dublin

D.II.1 *Intermediate Certificate manpower*

D. McCLUSKEY

Number of research workers: 2

Starting date: May 1969

Probable completion date: May 1971

Purpose: To study the factors involved in the ending of full-time education at Intermediate Certificate level.

Methods: Administered questionnaires, interviews, analysis of records.

D.II.2 *After the Leaving Certificate*

C. K. WARD

Number of research workers: 2

Starting date: May 1970

Probable completion date: September 1972

Purpose: To study the career patterns of those who terminated their full-time education at the Leaving Certificate.

Methods: Administered questionnaires, interviews, analysis of records.

Name of institute: THE EDUCATION DEPARTMENT, UNIVERSITY COLLEGE, CORK

Address: University College, Cork

Director: Professor Vincent A. McClelland, MA, PhD

A. HISTORICAL

The Education Department was founded concurrently with the establishment of the National University of Ireland (and its Constituent College, University College, Cork) on 2 December 1908, primarily to provide a university based post-graduate training course for secondary-level teachers.

B. STATUS AND PROGRAMME

1. The Department is part of, and reports to the Faculty of Arts of University College, Cork.

2. No governing body within the Department.

3. Other than the grading of its staff members into Professors, Lecturers and Assistants, there is no subdivision of the Department.

4. Staff (1970)

	Full-time	Part-time
Total	12	15
Teaching and research staff	11	15

5. Annual Budgets

1968	£10,000
1969	£15,000
1970	£25,000

6. The Education Department engages in the initial training of teachers through the post-graduate Higher Diploma in Education Course, which is catering for over 400 students in the current session.

With regard to the further training of teachers, the Department offers post-graduate Courses in Education leading to the MA and PhD degrees. (It is hoped to initiate the MEd degree in 1971-72.)

7. At its present state of development, the Department does not provide formal training facilities for educational research workers.

8. Other than individual research projects for Degrees of Master and Doctor, the Education Department does not engage in educational research activities.

The three major fields covered by Doctoral students are:-

- Educational Psychology,
- History of Education, and
- Methods of Teaching.

Name of institute: SCHOOL OF EDUCATION, TRINITY COLLEGE, UNIVERSITY OF DUBLIN

Address: School of Education, Trinity College, University of Dublin,
Dublin 2

Director: Professor J. V. Rice

A. HISTORICAL

The university was founded in 1591; the School of Education was established in 1906. It was founded to engage in educational research and to provide professional and academic courses in Education within the university.

The School was established on the initiative of the university.

B. ORGANISATION AND PROGRAMME

1. The School of Education is located within the Faculty of Arts (Humanities), and is an integral part of the University of Dublin. The Director holds the Chair of Education in the university.

2. Subject to the university Board and Council, there is a School Committee, consisting of all full-time members of staff, certain members of staff from other university departments, and student representatives.

3. The School functions as a unit; there are no subdivisions or sections.

4. Staff

	Full-time	Part-time
Research staff	3	10
Teaching and research staff	7	16
Total	10	26

5. The School of Education is funded as part of the university and, as such, does not possess a separate budget. Certain individual projects, however, are separately funded by the national Government.

6. The School has a major involvement in the training of second-level teachers; in addition, it participates in the education of primary school teachers.

7. In October 1970 a post-graduate training course for educational researchers was introduced.

8. Major fields of research interest: higher education, science education, current problems in Irish education.

C. RESEARCH PROJECT REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *A West Indian Science Curriculum Innovation Project (WISCIP)*

Dr B. L. POWELL (on leave of absence from Dublin University to act as Science Curriculum Consultant at the University of the West Indies), in association with
Dr I. W. WILLIAMS (University of Wales), and
H. THOMPSON (University of the West Indies)

Duration of project: To date, 2 years

Publication: *A West Indian Science Curriculum Innovation Project: Report of the International Clearinghouse on Science and Mathematics Curricular Developments, 1971*

Purpose: The introduction of a new integrated science curriculum in secondary schools for children in the age group 12-14. The project was piloted in Trinidad and will now be extended to the other Eastern Carribean islands.

Procedures: Teachers' text material were produced by the three research workers and distributed to the schools participating in the project. Weekly feedback reports from teachers in the field were sent back to the researchers; these were analysed and the texts and materials modified in the light of teaching experience. Inservice courses were arranged for participating teachers and new audio-visual aids were tested and evaluated.

Conclusions: The research indicated the desirability of an integrated approach to science teaching in the age group 12-14, in preference to traditional approaches. - Because of the particular problems of developing countries with regard to the short supply of trained and qualified science teachers, particular emphasis must be given to the production of texts and instructional materials.

D. RESEARCH PROJECTS IN PROGRESS

D.1 *An investigation into patterns of enrolment and academic performance in higher education*

A. M. FITZGIBBON, J. V. RICE (assisted by abstractors and computer programmers)

Number of research workers: 12

Starting date: January 1969

Probable completion date: January 1972

Purpose: The research is a statistical analysis of the undergraduate entrants to the University of Dublin (Trinity College) in the decade 1960-69, in terms of age, socio-economic background, education, geographical origin and entry qualifications. It seeks to determine what correlation, if any, exists between particular entry profiles and ultimate performance in the various disciplines of the university.

Procedure: For students who entered the University of Dublin as undergraduates in the ten-year period, 1960-69, all relevant entry information was abstracted from university records. This is presently being compared by computer with similarly abstracted data relating to academic achievement in the university.

D.2 *An analysis of instructional procedures in second and third-level education*

J. V. RICE, L. A. CAMERON, P. C. O MAOLAIN, M. B. KILLEAVY, V. R. LYNOTT, J. F. MADDEN

Starting date: January 1969

Probable completion date: January 1974

Purpose: The research seeks to determine the relative effectiveness of selected instructional procedures and techniques with reference to the cognitive and behavioural content of the material communicated.

Procedure: The assembly, analysis and abstraction of available research findings on teaching and communication. - The creation of a documentation facility on teaching and communication, using microfiche for the storage of data and a computer-based system of retrieval. - The development of a taxonomy of educational content.

D.3 *The interaction of test item and teaching method*

M. DALY and S. P. Ó BUACHALLA

Starting date: October 1969

Probable completion date: August 1971

Purpose: To investigate the extent to which the type of question paper set in external examinations influences the teaching methods employed in science teaching.

Procedure: Samples of science teaching by a selected group of teachers (n:20) have been recorded and analysed using an Amidan-Flanders type matrix. Their pupils (n:500) were administered a specially constructed test paper within a few weeks of taking the public external examination. Performance on tests was correlated. Both test papers were analysed for content and emphasis, utilising Guilford and Bloomian taxonomic systems. The categorised performance patterns derived from this analysis were linked to the teacher profile obtained by the classroom recordings.

D.4 *Indicators and determinants of quality in science education in second-level schools*

E. O'FLAHERTY and S. P. Ó BUACHALLA

Starting date: October 1969

Probable completion date: August 1971

Purpose: To identify those factors, deriving from school, teacher, pupil and syllabus characteristics, which influence the quality of the teaching and learning of science in second-level schools in Ireland.

Procedure: A national survey of science teachers was conducted which sought data on teacher profile, school policy, instructional objectives and procedures, time-table and resource allocation. The data will be correlated with selected evaluatory performance indicators.

D.5 *The presentation of integrated science concepts in junior second-level teaching*

K. RANKIN and S. P. Ó BUACHALLA

Starting date: October 1970

Probable completion date: August 1972

Purpose: To investigate the effectiveness of teaching science to the 12-15 year age group by means of an integrated concept approach.

Procedure: The development of teaching sequences based on the integrated approach and the evaluation of these sequences in the context of control groups, utilising the traditional subject-based approach.

D.6 *An investigation into the comparative effectiveness of differing micro-teaching techniques in the training of second-level teachers*

P. F. LOUGHLIN, L. A. CAMERON, S. M. PARKES

Starting date: October 1970

Probable completion date: January 1972

Purpose: To examine how micro-teaching can be used in the Irish context to assist in the training of graduate teachers. - To compare the short-term effectiveness of differing micro-teaching techniques.

Procedure: Feasibility study; comparison of ratings of improvement between teach and reteach sessions with differing intervening techniques.

Name of institution: DEPARTMENT OF EDUCATION, ST. PATRICK'S COLLEGE, MAYNOOTH

Address: St. Patrick's College, Maynooth, Co. Kildare

Director: Rev. Professor Seamas V. O. Suilleabhain, CFC, BA, PhD, MEd, MPsychSc, ABPsS

A. HISTORICAL

Year of foundation: 1926.

The need to provide suitable training for secondary teachers led to the foundation of the College.

B. STATUS AND PROGRAMME

1. The College is a recognised College of the National University of Ireland.

2. Being a University Institution, the Department of Education is ultimately subject to the College Trustees who finalise appointments and finance. In academic matters the Department is subject to the Academic Council (all the Professors) of the College and to the Board of Studies and Senate of the National University of Ireland.

3. The Department is under the sole charge of the Professor of Education. There are two main Sections:

(i) a one-year post-graduate course leading to the Higher Diploma in Education;

(ii) Higher Degrees (MA, PhD) by research.

Under (i) may be listed Philosophy/Psychology/Sociology/History/Comparative Education/Methodology (General and Specific) and Practical Teaching under Supervision.

4. Staff (1970)

		Full-time	Part-time
Total	18	3	15
Teaching and research staff			2 (PhD) 9 (MA)

5. Annual Budgets

1968	£2,504
1969	£3,603
1970	£4,008

Exclusive of accommodation.

6. In 1969-70 the Department gave initial training to 209 post-primary teachers.

In 1970-71 the Department is giving initial training to 270 post-primary teachers.

In addition the Department runs each year an in-service course for teachers. In 1968-69 the course was on the Psychology of Learning and over 100 teachers participated. In 1969-70 the Department ran a course on "Adolescence" at which approximately 260 teachers attended.

7. The Professor organises post-graduate research on an individual basis with such students as are accepted for higher degrees. Each is closely supervised in research techniques appropriate to the area of inquiry. In November 1970 there are eleven such research workers.

8. Aim: In general the aim of the Department is to encourage research into practical problems connected with methodology and structural changes in the educational systems.

Methods: The methods vary from programme to programme but in general the methods are based upon critical assessment of documentation and/or official sources, surveys, evaluation of empirical findings, application of information to present problems. Each research worker must follow the normal academic convention and disciplines in presenting his/her work.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

No major research project completed in 1968-69 and 1969-70.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

Doctorate theses

D.1 *Evaluative studies of second language learning especially in the middle school (ages 14-16)*

N. GOLDEN

Starting date: 1969

Completion date: Not known precisely

Purpose: To establish the present position of second language learning with particular reference to the need for bridging the gap between modern audio-visual techniques and the more normal literary courses of the VIth form (senior division of the grammar school).

Methods: Review of the literature; questionnaires at national and international level; personal contacts in Europe through Language associations; particular contact with schools noted for advanced techniques.

D.2 *Contrastive studies in modern language teacher education: France, Germany, Ireland*

D. O'LEARY

Starting date: 1970

Completion date: Not precisely known

Purpose: To ascertain the precise position of teacher education in the three countries, to explore common problems and to seek out possible lines of solutions.

Procedure: Review of the literature; personal visits to the countries involved; contacts at governmental and institutional level.

MA theses

D.3 *History of secondary education in Ireland since 1878*

D. C. O'CONNOR

Starting date: 1968

Probable completion date: March 1971

Purpose: To provide an accurate historical account of the period.

Procedure: Original archival sources and contemporary documents.

D.4 *The pedagogical and psychological basis for the new mathematics syllabus in post-primary schools with special reference to the mathematical education of girls*

M. GLENNON

Starting date: 1968

Completion date: Not precisely known

Purpose: To work out the precise basis on which the new mathematics syllabus is established and then to work out the best pedagogical approach to the syllabus paying particular attention to the implications for the mathematical education of girls.

Procedure: Study of the relevant literature in psychology together with an exact awareness of the sources of the new mathematical thinking.

D.5 *A critical study of the comprehensive school with particular reference to the Irish comprehensive experiment*

E. C. BOYLE

Starting date: 1969

Probable completion date: 1971

Purpose: To explore in depth the Irish experiment in comprehensive education by reference to work in Europe and America.

Procedure: Review of existing literature; documentation; personal experience; critical study of sources.

D.6 *The organisation of a school syllabus using Network Analysis techniques*

C. TROY

Starting date: 1968

Probable completion date: January 1971

Purpose: To work out the best way to apply Critical Path Analysis to the organisation of a school syllabus. In this instance the application is confined to the junior secondary school science syllabus in physics, chemistry and biology.

Procedure: Contact with experts in Critical Path Analysis mainly in the industrial sector; contact with science experts both at university and grammar school level; seminars and questionnaires. Also contact with the University of Birmingham where similar work is now going on.

D.7 *The history of Achimota College, Ghana*

M. WALSH

Starting date: 1968

Probable completion date: Early 1971

Purpose: To give an accurate historical account of the early years of the College and the influence of the College on the country.

Procedure: Original sources in the College, and original sources in the Colonial Office, London. Personal contact.

D.8 *Teachers' salaries since 1922: a historical survey and economic evaluation*

S. P. O CONCHUIR

Starting date: 1969

Completion date: Not precisely known

Purpose: To clarify present controversy in this area and to establish possible lines of a solution.

Procedure: Original documents; parliamentary papers; statistics; economic evaluation.

D.9 *A sociological and educational survey of an Irish girls' boarding college*

M. LILLIS

Starting date: 1969

Probable completion date: Late 1971

Purpose: To ascertain the influence of a girls boarding school on its inhabitants during their enrolment in the school; also to ascertain the precise background of such pupils and their subsequent careers.

Procedure: Review of literature; sociological techniques; questionnaires; scrutiny of record cards; interviews.

D.10 *A comparative study of teacher education with emphasis upon content and methods rather than structures*

E. O BEACHAIN

Starting date: 1969

Completion date: Not precisely known

Purpose: To study techniques of improving teacher education with a critical appraisal of some of the recent innovations brought about by educational technology.

Procedure: Critical review of the literature; personal contacts in Europe; experimental work with new aids such as television, films, micro-teaching, etc.

D.11 *Post-primary education in Ireland 1960-70; a critical appraisal of recent government policies on reconstruction*

E. RANDLES

Starting date: 1969

Completion date: Not precisely known

Purpose: To place in perspective recent educational policies in Ireland; to ascertain the facts and present a co-ordinated critical view of the restructuring programme.

Procedure: Official documents, parliamentary debates; educational writings.

Name of organisation: FORAS TAIGHDE AR OIDEACHAS (Educational Research Centre)

Address: St. Patrick's College, Dublin 9

Director: Dr Thomas Kellaghan

A. HISTORICAL

1. Year of foundation: 1966.

2. Reasons: the absence in the country of a body concerned with research in education as a major part of its work; the feeling that such a body was desirable.

3. Founded on the initiative of St. Patrick's College (for the education of teachers), Dublin.

B. STATUS AND PROGRAMME

1. The Research Centre is affiliated to a college for the education of teachers.

2. No directing, governing or advisory board.

3. No divisions, sections, units.

4. Staff (1970)

   6 full-time researchers

5. Funds are provided by the national Government and disbursed through St. Patrick's College; there is no separate budget for research.

6. Members of staff do a small amount of teaching in St. Patrick's College; also take part in in-service courses for teachers.

7. No training facilities for educational research workers.

8. The purpose of the Research Centre is to initiate and carry out research on the development of the child and adolescent, paying particular attention to the pupil in the school setting. Members of the Centre have carried out research on a wide variety of topics. The main areas in which work has been carried out or is in progress are evaluation, language, reading, and social factors in education. Survey and experimental methods are used.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Analysis of Leaving Certificate examinations*

J. MACNAMARA and G. F. MADAUS

Time: 1 year

Purpose: To determine the intellectual activities for which marks are awarded in nine subjects of the Irish Leaving Certificate; to determine the marker reliability of Leaving Certificate marks.

Procedure: Bloom's taxonomy of educational objectives is used in the analysis of intellectual activities. To examine reliability, a sample of 40 answer papers in each subject were marked by two different examiners and re-marked by a single marker.

Conclusions: Analysis of questions and answers in nine subjects of the examination found that greater weight was placed on knowledge (ie the learning and retention of information) than on higher skills such as analysis, synthesis and evaluation. In a study of marker reliability in the examination, a high degree of unreliability was found in the marking of all subjects. Two principal ways for counteracting such unreliability are suggested: the use of multiple-choice questions and the multiple marking of essays.

References:

Macnamara, J. and Madaus, G. F. Marker reliability in the Irish Leaving Certificate. *Irish Journal of Education*, 1969, 3, 5-21.

Madaus, G. F. and Macnamara, J. The quality of the Irish Leaving Certificate examination. *Irish Journal of Education*, 1970, 4, 5-18.

Madaus, G. F. and Macnamara, J. *Improving the public examination: A study of the Irish Leaving Certificate.* Dublin: Educational Research Centre, 1970.

C.2 *Factors related to choice of post-primary school*

T. KELLAGHAN, E. NEUMAN, V. GREANEY

Purpose: To relate choice of type of post-primary school to psychological (verbal ability), educational (school progress) and background (social status, family size, ordinal position, parental interest) factors.

Procedure: A representative sample of Irish school-children (N:500) took a verbal reasoning test at age eleven. Educational and background information was also obtained on pupils. Two years later, the type of post-primary school being attended was determined.

Conclusions: Significant differences on most factors assessed were found between pupils according to the type of school attended at age 13-14.

Reference:

Kellaghan, T. and Greaney, V. Factors related to choice of post-primary school in Ireland. *Irish Journal of Education*, 1970, 4, 69-84.

C.3 *Family variables and verbal reasoning ability*

T. KELLAGHAN, J. MACNAMARA and E. NEUMAN

Time: 2 months

Purpose: To examine the relationship between verbal reasoning ability on the one hand and sex, social status, family size and ordinal position in family on the other.

Procedure: Information on verbal reasoning ability, social status, family size and ordinal position was collected for a representative sample of eleven year old Irish school-children. Multiple regression analysis of the data was carried out, with verbal reasoning score on the dependent variable.

Conclusion: Social class, family size and ordinal position in family were all found to be significantly related to verbal reasoning ability.

Reference:

Kellaghan, T. and Macnamara, J. *Family variables and verbal reasoning ability*. Mimeographed.

C.4 *A study of individualised reading*

V. GREANEY

Time: 2 years

Purpose: To compare an individualised approach to reading (in which pupils selected their own reading material which they read at their own rate) with a traditional approach.

Procedure: All pupils in two sixth standards in a Dublin boys' primary school were randomly assigned either to an experimental group (N:36) which used an individualised approach to reading, or to a control group (N:38) which used the traditional basal reader approach with a minor variation to counteract possible Hawthorne effects. Both groups were taught by the same teacher. The experiment lasted eight months.

Conclusion: At the end of the period, significant differences in favour of the experimental group were found in the book reading practices of the groups. The experimental group read more books and devoted more time to book reading, the fiction they read was of a higher quality and the range of topics covered in their non-fiction reading was wider.

Reference:

Greaney, V. *A comparison of individualised and basal reader approaches to reading instruction.*

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Aspects of vocational development in adolescence*

E. O'CONNOR

Starting date: September 1969

Probable completion date: September 1971

Purpose: To examine the vocational development of adolescents and the influence of certain psychological and sociological factors on job attitudes and job selection.

Procedure: The vocational maturity of 317 adolescents aged 14 to 17 was assessed by means of questionnaire, interview and standardised test. Measures of ability, personality and level of aspiration were also obtained together with information on social status, hobbies and part-time work.

D.2 *The effect of peer-group influences on the behaviour of adolescents*

D. KING, T. KELLAGHAN

Starting date: July 1970

Probable completion date: July 1972

Purpose: To examine the determinants of social climates in schools; the consequences for students of working in a particular climate (effects on self-evaluation, school progress and vocational aspirations).

Procedure: Information on group values, group membership, ability and school progress to be obtained by interview, questionnaire and standardised tests.

D.3 *Studies of disadvantaged children*

T. KELLAGHAN, D. BRUGHA

Number of research workers: Additional part-time psychologists and social workers are involved in the project

Starting date: October 1968

Probable completion date: 1974

Purpose: To examine the characteristics of children living in a disadvantaged area; to develop a suitable curriculum for a pre-school intervention programme; to assess the effects of intervention procedures.

Procedure: The intellectual, perceptual, language and personality development of three and eight year old children has been assessed using a variety of procedures. Home background has also been studied. The basic comparison is to be made between a sample of eight year old children who have received no special treatment and a sample who have spent two years in a pre-school and three years in an adapted junior school programme.

III. EDUCATIONAL RESEARCH PROJECTS CARRIED OUT BY ORGANISATIONS NOT PRIMARILY CONCERNED WITH EDUCATIONAL RESEARCH

Name of organisation: THE ECONOMIC AND SOCIAL RESEARCH INSTITUTE

Address: 4 Burlington Road, Dublin 4

Director: Professor M. P. Fogarty

Research project

Values and attitudes of teachers in Ireland

J. RAVEN

Number of research workers engaged in project: 2

Total amount of time spent on project: 2 years, 1968-69

Purpose: To assess values and attitudes of pupils and teachers in Ireland.

Procedure: Survey and statistical techniques.

Conclusions: The project fits into a general survey of values and attitudes in Ireland being carried out by J. Raven.

Reference: Not yet published.

I. EDUCATIONAL RESEARCH POLICY

A.1 Agencies which promote and plan educational research

On the establishment of the *Norwegian Research Council for Science and the Humanities* in 1949, one of the six sub-groups of the Council was especially assigned to research in psychology and education. As part of the general work of the Research Council, this sub-group initiates and supports research in those fields.

The 1954 Act of Experiments in Education provided for the establishment of the Council for Experiments in Education which has recently changed its name to the *National Council for Innovation in Education*. The Council is an independent, consultative body reporting to the Ministry of Education. Its function is to advise and inform the Ministry, and to supervise field projects carried out under the 1954 Act. Its daily work is handled by a secretariat, with a staff of about 30 persons.

In 1967, the Research Council for Science and the Humanities appointed an *ad hoc committee for educational research*, charged with the task of working out a long-term programme for the development of such research in Norway. The committee submitted its report early 1968, its recommendations being adopted by the Research Council and presented to the Ministry of Education. In implementing these recommendations, the Research Council and the Council for Innovation in Education have established a *joint co-ordination committee for educational research*. One of its tasks is to formulate more concrete proposals for a short-term research programme within the framework of the suggested long-term development programme.

In 1964, a *Department of Planning* was set up within the Ministry of Education, one of its functions being to act as a liaison between the administration work in the Ministry and outside research. It also collaborates closely with various *ad hoc* commissions set up to study reforms in special fields of education. The director of the Planning Department acted as the chairman of the Research Council's *ad hoc* committee for educational research, and he also chairs the Co-ordination Committee.

A.2 Finance

Basic appropriations are provided through the regular state-financed university budgets and the bodies mentioned above contribute to the finance of educational research projects.

Expenditure for educational research:	mill. N.kr.	As % of total educational expenditure
1969 (account)	4.0	0.2
1970 (budget)	7.0	0.3
1971 (budget)	10.6	0.35

B. Priority fields

Decisions on priorities in the promotion of educational research are primarily taken by the National Council for Innovation in Education, and the joint co-ordination committee for educational research (*cf.* A.1).

Main priorities are:

1. School autonomy; self-governed schools; authority relations. Decision-making structure.

2. Small schools/large schools; school performance; range of choice of subjects.

3. Localisation of schools (recruitment areas, transfer problems, etc); decentralisation/centralisation of school administration.

4. Pedagogical research; new methods of teaching and learning; new subjects; teaching material/textbooks.

5. School adjustment; behavioural problems.

6. The pre-school.

7. The 9-year compulsory school.

8. The post-compulsory schools. New structure in the *gymnasium*; integration of *gymnasium* and vocational school.

C. Information

A survey of current educational research was published in early 1971 in Norwegian by the Ministry of Education. This is expected to become an annual publication. An improved information service is at present being planned.

The National Council for Innovation in Education regularly publish research reports, and through various other means (seminars, meetings, personal contacts, etc) inform all concerned about their activities.

D. New trends

Major changes in the present structure of educational research are not expected in the near future. Some important problems should however be mentioned:

- A more effective information structure is needed.

- It is necessary to ensure the integration of research and innovation into the decision-making structure at all levels.

- The decision-making structure will itself be an important area of research in the future. The concept of self-governing and self-changing educational institutions will be of great significance for such developments.

- Long-term planning of educational research-structure must be promoted, a coherent research programme must be developed and the allocation of resources improved.

II. ACTIVITIES OF EDUCATIONAL RESEARCH ORGANISATIONS

Replies were received from the following:

1. University of Bergen, Institute of Sociology, Division for the Sociology of Education
2. University of Oslo, Institute for Educational Research
3. University of Trondheim, Institute of Education
4. School Board of Oslo, Department for School Experimentation and Research
5. Norwegian Research Council for Science and the Humanities, Institute for Studies in Higher Education and Research

Name of organisation:	UNIVERSITETET I BERGEN, SOSIOLOGISK INSTITUT, AVDELING FOR PEDAGOGISK SOSIOLOGI (University of Bergen, Institute of Sociology, Division for the Sociology of Education)
Address:	Christies gt. 19, Bergen
Director:	Institute of Sociology: Tormod Hermansen, Assistant Professor
Project Director:	Division for the Sociology of Education: Guttorm Nørstebø, Research Associate

NB The information below refers to The Division for the Sociology of Education only, which is *not* a formal organisation separate from the Institute of Sociology.

A. HISTORICAL

Year of foundation: The research programme began in 1968.

The development of ecological archives of educational background data at the Institute of Sociology and a general interest in the problem of how environmental and social factors operate within educational organisations led to the elaboration of a specific research programme which was developed by Guttorm Nørstebø.

B. STATUS AND PROGRAMME

1. The Division for the Sociology of Education is part of the Institute of Sociology at the University of Bergen, but has its own budget, financed by the Ministry of Church and Education. The Project Director gets his salary from the University budget and holds a position as a Research Associate (*amanuensis*) at the University.

2. No directing board.

3. The informal Division for the Sociology of Education is organised as a research team with a Project Director and graduate students as research assistants.

4. Staff in 1970

	Full-time	Part-time
Research staff	1 (director)	3
Technical/ Secretarial staff	1	2

5. Total budget

1968	-
1969	28,000.- N.kr.
1970	90,000.- N.kr.

Source of finance: 1969: The Norwegian Research Council for Science and the Humanities and The Council for Experiments in Schools; 1970: The Research Council and the Ministry of Church and Education.

6/7. No participation in teacher training or in training of educational research workers.

8. The main research problems investigated at present are related to value discrepancies between home environments, the school, the pupils and the peer group. The methods applied are mainly survey methods.

MAJOR RESEARCH PROJECTS IN PROGRESS

1. *The* gymnasium *project*

Responsible researcher: G. NØRSTEBØ

Purpose: To measure how successful the new *gymnasium* reform introduced by the Council for Experiments in School at a few experimental schools in 1969 is in relation to the educational aims set forth for the experimental schools and to measure the value preferences of the pupils and their expectations of and satisfaction with the school, the curriculum, the methods, the teachers and the other pupils.

Procedure: Questionnaires were sent out in spring 1970, to be followed up by interviews and questionnaires during autumn 1971 and spring 1972.

N=550 *gymnasium* pupils. On the basis of these data the relationship between the pupils' value orientations, their socio-economic background, their degree of adjustment and satisfaction with the school and their school performances will be studied.

Reference: A short mimeographed report on the project (in Norwegian).

2. *The PARENT project*

Responsible researcher: G. NØRSTEBØ

Purpose: To measure the parents' value orientations, their attitudes to the new comprehensive school, its content and aims, the contacts between the parents and their children and the co-operation between the home and the school.

Procedure: Data concerning the pupils' school performance, choice of study programmes, and ability level were collected. A postal questionnaire was distributed to about 600 parents in Bergen. 75% of the parents returned the questionnaire.

About 150 parents from the above mentioned population will be interviewed on the relationship between the home and the school in spring 1971. The interviews will be focused on the problem of authority relations between teachers and parents. Half of the sample are parents who did not return the postal questionnaire.

Name of organisation:	UNIVERSITETET I OSLO, PEDAGOGISK FORSKNINGSINSTITUTT (University of Oslo, Institute for Educational Research)
Address:	Postboks 1092, Blindern, Oslo 3
Director:	Professor Johannes Sandven

A. HISTORICAL

Year of foundation: 1936. Operative: 1938.

The Institute was created to act as a central institution for educational research and school experimentation in Norway. It was founded by decision of Parliament.

B. STATUS AND PROGRAMME

1. The Institute is a part of the Faculty for Social Sciences at the University of Oslo.

2. Academic staff and student representatives form an assembly with mainly policy-making influence. The assembly elects a board of which the director is the chairman. Decisions are made by either the assembly, the board, or the director.

3. No divisions, sections, etc.

4. Staff in 1970

	Full-time	Part-time
Total Researchers or Teachers and research staff	41	26

5. Budget

1968	125,000.- N.kr.
1969	135,000.- N.kr.
1970	160,000.- N.kr.

(Figures indicate material and administrative costs only.)

Predominant source of finance: Government grant via University budget; Norwegian Research Council for Science and the Humanities and others.

6. No participation in teacher training. Our staff, however, teaches for academic degrees in education.

7. The Institute offers initial as well as advanced training for both empirical and historical researchers.

8. Aims: To offer instruction in education *per se*, to educate researchers (historical and empirical); to carry on research in all areas of education.

Main fields:
- Educational psychology
- Basic psychology
- Measurement and statistics, with statistical analyses
- Educational current history
- History of education
- Didactics, with theory of teaching and up-bringing
- Child development, with differential psychology and the psychology of personality
- Educational sociology
- Comparative education
- Theory of learning
- Teacher programming and curriculum development
- Guidance
- Research method and research orientation

Methods:
- Empirical/statistical
- Case studies
- Content analytical
- Historical

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Normalplan for grunnskolen* (General plan for instruction in the 9-year 'basic' school)

Responsible researcher: H. DOKKA

Number of research workers engaged in project: 50-60

Total time spent on project: 2¾ years

Purpose: To prepare a new plan for instruction in the elementary school.

Procedure: Mostly collecting (not systematically) teachers' experience.

Reference: *Forarbeid til normalplan for grunnskolen*, Oslo, 1970.

C.2 *Field experiment with individualised instruction in Norwegian and mathematics in grades 1, 2 and 3*

Responsible researcher: A. HOFSET

Number of research workers involved: 2

Total time involved: August 1968 - June 1971

Purpose: To test possible effects on pupils of a material-method system.

Procedure: Control group experiment. 28 E-classes and 23 C-classes with 'traditional instruction' are compared.

Conclusions: (preliminary) Academic progress, as measured by tests: About equal in E and C-classes in Norwegian, significantly better in E-classes in mathematics. Attitude towards Norwegian equal, towards mathematics more favourable in C-classes.

References:

Hofset, A. (1969) *Feltforsøk med pedagogisk differensiert undervisning. Rapport for skoleåret* 1968-69 (mimeo).

Hofset, A. (1971) *Feltforsøk med pedagogisk differensiert undervisning. Rapport for skoleåret* 1969-70 (mimeo).

Forsøksnytt (Forsøksrådets informasjonsserie), No. 1, 1970, pp.12-31.

C.3 *Aspirasjon og prestasjon. Et teoretisk og eksperimentelt studium* (Aspiration and school performance)

Responsible researcher: A. LYSNE

Number of research workers engaged in project: 2

Total time spent on project: 4 years

Purpose: To study the relationship between aspiration and school performance.

Procedure: Experimental (field experiment).

Conclusions: Aspiration is a very important part of the motivation complex for school study and school performance. The effect depends upon the school situation and personality factors.

C.4 *Pupils in general and school-rejecting pupils compared. Results of an investigation concerning relations to school and personality characteristics among 9th graders in the compulsory school*

Responsible researcher: J. SANDVEN

Number of research workers engaged in project: 3

Total time spent on project: 2 years

Purpose: To bring to light some main characteristics in the pupils' relations to school, and to compare the findings for pupils in general with school-rejecting pupils, ie pupils who express a desire to leave school immediately if permitted. Furthermore the purpose was to compare the school-rejecting pupils with the other pupils with regard to some major personality characteristics: school achievement motivation, feeling of security, problem-solving ability.

Procedure: Questionnaire, sample of about 3,500.

Conclusions: The findings show that the bulk of pupils feel attached to school, like their work, and make efforts. The school-rejecting pupils present a complex picture. But as a group they differ clearly from others in their relations to school as well as in personality traits.

Reference: Scand. J. Educ. Res. 12, 91-140.

C.5 *Recruitment to the* gymnasium. *A study of the influences of socio-economic and personality factors on recruitment to the* gymnasium

Responsible researcher: J. SANDVEN

Number of research workers engaged in project: 4

Total time spent on project: 2 years

Purpose: To elucidate the extent to which the socio-economic factors may be influencing recruitment when the effect of personality factors, deemed to be important, are controlled and taken into account; and to investigate the possible effect of personality factors on recruitment when the socio-economic level is controlled or given due regard.

Procedure: Questionnaire, sample of about 3,500.

Conclusions: The results make it evident that the home environment, as expressed by socio-economic level, affects recruitment even when intellectual capacity, school achievement motivation, and feeling of security are controlled. An effect, in some cases marked, of each of these personality factors is also brought to light.

Reference: Scand. J. Educ. Res. 13, 29-68.

C.6 *Do we select the right people for teacher training?*

Responsible researcher: J. SANDVEN

Number of research workers engaged in project: 5

Total time spent on project: 3 years

Purpose: To study the admission criteria for teacher training.

Procedure: Test for teacher attitudes.

Reference: Paedagogica Europaea 5, 113-36.

C.7 *Pupils with lowered conduct marks at the end of the compulsory school. A study of their situation in school, their background and possibilities*

Responsible researcher: J. SANDVEN

Number of research workers engaged in project: 4

Total time spent on project: 2 years

Purpose: To bring to light whether characteristic differences exist between pupils who get a lowered mark for conduct and other pupils, and what are the particular features of such differences.

Procedure: Material collected in the compulsory school partly by direct investigations among pupils in the 9th grade, partly by means of information and evaluations from the schools. Sample of about 3,500.

Conclusions: As the school is today with regard to content, methods, and demands, pupils who are weak intellectually and in achievement motivation, will much more frequently run into a situation where they develop behaviour conflicting with the norms of the school, thus leading to a lowered behaviour mark. Though it is not possible to know whether an alteration of the school would result in behaviour in harmony with educational aims, it is argued that serious effort in this direction should be made, considering the importance of the behaviour and character development of the pupil.

Reference: Scand. J. Educ. Res. 14, 74-104.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Miljø-laere i grunnskolen* (Environmental education in the 'basic' school)

Responsible researcher: B. BJØRNDAL

Number of research workers engaged in project: 15

Starting date: June 1968

Probable completion date: December 1976

Purpose: To design and try out experimentally teaching-learning units and sequences that may represent new ideas and new ways in science teaching, directed, in particular, towards environmental education. - The major objective of environmental education is to produce a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution.

Procedure: The project deals with curriculum development in science and is conducted by a team composed of specialists in science and education working together with teachers.

Methods: Criterion referenced tests; teachers' reports; teachers' interviews; questionnaires or tests of students' attitudes, interests and motivation; observation-interaction analysis; testing of additional student variables.

D.2 *The effect of simultaneous transmission of information through two channels*

Responsible researcher: G. HANDAL

Number of research workers engaged in project: 2

Starting date: January 1970

Probable completion date: 1973

Purpose: To measure the effects on information retention of varying modes of presentation of a message (visual, auditive, iconic, digital), especially the effects of using combinations of such modes of presentation.

Procedure: The project comprises three phases: Using the Norwegian TV news as an example of information presentation, the programmes are analysed to identify the most common combinations of presentational modes used in this connection. - In the combinations selected on this basis, the degree of relevance (identity) between the information presented in the different modes of presentation involved will be evaluated. - Finally the information retention resulting from different combinations of modes of presentation will be experimentally tested.

D.3 *Feltforsøk med førskoleklasser* (Field experiment with pre-school classes)

Responsible researcher: A. HOFSET

Starting date: August 1969

Probable completion date: July 1971

Purpose: To test a programme of pre-school education organised in conjunction with an ordinary primary school.

Procedure: To date: Reports from teachers (every six months) and parents (every year), by mimeographed questionnaires including some open-ended questions for free comments.

D.4 *Årsaker til manglende skoletrivsel. En sammenliknende studie i ungdomsskole og gymnas* (Causes of lack of sense of well-being at school. A comparative study in the compulsory youth school and the *gymnasium*)

Responsible researcher: J. SANDVEN

Number of research workers engaged in project: 2

Starting date: Winter 1966

Probable completion date: Not determined

Purpose: To explore causes of a lack of sense of well-being at school through systematic comparisons among pupils indicating different degrees of sense of well-being, the comparisons being made with respect to various personality and environmental factors.

Procedure: Material collected in the compulsory school and the *gymnasium* partly by direct investigation (questionnaires), partly by means of information and evaluations from the schools. Sample about 3,500.

D.5 *Relationship between the personality of the teacher and his teaching behaviour as perceived by pupils*

Responsible researcher: J. SANDVEN

Number of research workers engaged in project: 2

Purpose: See title of project.

Procedure: Questionnaire.

D.6 *Educational ideology in various social groups*

Responsible researcher: J. SANDVEN

Number of research workers engaged in project: 2

Purpose: See title of project.

Procedure: Questionnaire.

D.7 *Mål og metoder for kroppsøvingen i Sverige, England og Vest-Tyskland. Et komparativt studium* (Aims and methods of physical education in Sweden, England and West Germany. A comparative study)

Responsible researcher: F. STENE

Starting date: January 1970

Probable completion date: Spring 1973

Purpose: To study in particular the following areas of problems:
- psycho-motor development of children under the influence of physical education,
- the development of physical fitness and health,
- activation of cognitive processes in physical education,
- social development in physical education situations,
- emotional adjustability by means of physical education,
- motivation for life-long physical activities.

Procedure: School visits; interviews and discussion; observation; analysis of written material.

D.8 *Laerardugleiksgransking* (Investigation of teacher effectiveness)

Responsible researcher: Å.L. STRØMNES

Number of research workers engaged in project: 3

Starting date: January 1970

Probable completion date: December 1973

Purpose:
- to test a communication model of variables operating in teaching situations,
- to construct tests for measuring important variables in the communication model,
- to describe statistical relations between these variables and between the variables and different criteria for teacher effectiveness,
- to construct materials for teacher training for three different groups of students so that each group is influenced differently. The material for the first group is a teacher-training package containing mainly exercises in simulating teacher behaviour in different situations and contexts. The material for the second is a structured progressive education programme for

real-life training. The material for the third group is a package of television programmes (10 minutes covering teaching in critical situations in the classroom, didactic observation, and planning, followed by structured discussions),

- to design and carry out a quasi-experiment with pre- and post-test, the experimental variable having four levels (the three groups mentioned above plus a control group) in order to determine to what extent teacher effectiveness is influenced by learning and also to determine the eventual strength of each of the three training programmes, especially the effects on the least able students,
- to evaluate the long-term effects of the learning programmes with the help of a follow-up study two years after the students have received their teacher certification.

Procedure: Surveying key variables in the communication model; correlating variables (multivariate procedures); quasi-experiment with 4 levels on the experimental variable; analysis of variance of data from the quasi-experiment; N = approximately 300.

D.9 *Grisgrendtprosjektet: Trivsel og tilpasning hos elevar i ungdomsskolar av ulik storleik og sentraliseringsgrad* (Rural schools: Personal and social adjustment among pupils at comprehensive schools of different size and degree of centralisation)

Responsible researcher: S. ØYGARDEN

Number of research workers engaged in project: 3

Starting date: January 1969

Probable completion date: Autumn 1972;

Purpose: To examine the degree to which pupils from remote areas at centralised schools are integrated into the school society, and how pupils from different backgrounds adjust themselves to school life.

Procedure: Data from a sample including about 3,500 pupils, sampled disproportionately within 10 different districts defined by size of school and degree of centralisation, are collected by means of questionnaires and scales measuring attitudes to school, teacher and friends. Special scales have been developed to measure self-concept, and the degree of anomie.

Name of organisation: UNIVERSITETET I TRONDHEIM, NORGES LAERERHØGSKOLE, PEDAGOGISK INSTITUTT
(University of Trondheim, Institute of Education)

Address: Bjørnsonsgt. 12, 7000 Trondheim

Director: Professor Torstein Harbo

A. HISTORICAL

Year of foundation: 1922.

The reasons for founding the University College for Teachers - as it was then called - was mainly the need to offer further educational possibilities to teachers at elementary school level. The initiative to found the College was taken by the Norwegian Ministry of Education.

B. STATUS AND PROGRAMME

1. The Institute of Education is part of the University of Trondheim.

2. At the Institute of Education there is a governing board, the Institute Council, of 25 members. It decides on all important matters concerning the Institute. On the Council are represented the permanent faculty members, the faculty members in recruitment positions, the technical/administrative staff and the students.

3. The following sections exist within the Institute of Education:
- Section for educational theory,
- Section for teachers' practical training.

4. Staff in 1970

	Full-time	Part-time
Teaching and research staff	16	9

5. Total budget

1968	299,000 N.kr.
1969	291,000 N.kr.
1970	335,301 N.kr.

The source of finance is the national government through the Council at the University of Trondheim.

6. The section for teachers' training participates in the initial practical training of teachers.

7. No participation in the training of educational research workers.

8. The following are the main research fields of the organisation:

- research in the history of education,
- comparative research,

- research in educational psychology,
- research on instruction and school organisation.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Naturfag i skolen* (The teaching of science at secondary school level)

Responsible researcher: H. OLSEN

Number of research workers engaged in project: 5

Starting date: Autumn 1970

Probable completion date: Spring 1976

Purpose: To test new methods and instructional material in the teaching of science.

The project is financed by the Section for Research and Curriculum Development, Ministry of Education.

D.2 *Morsmålundervisningen i sammenholdte klasser* (The teaching of Norwegian in ungraded classes)

Name of responsible researcher: T. HARBO

Number of research workers engaged in project: 1 research worker + MA students

Starting date: Autumn 1971

Probable completion date: Spring 1975

Purpose: To map the effect of different teaching methods and social grouping in teaching of Norwegian in comprehensive schools.

The project is financed by the Schools Council for Research and Development.

Name of organisation:	OSLO SKOLESTYRE, AVDELING FOR FORSØK OG FORSKNING (School Board of Oslo, Department for School Experimentation and Research)
Address:	Strømsveien 102, Oslo 6
Director:	Ass. superintendent Oddvar Vormeland, PhD

A. HISTORICAL

Established in 1964 on the initiative of the superintendent of the school system of Oslo to create a department for experimentation and research intended to be an integral part of the developmental and innovative work undertaken within the system.

B. STATUS AND PROGRAMME

1. The organisation is part of the municipal school system.

2. It has no governing board outside the municipal school board. There is a committee elected by the school board to prepare actual proceedings before organisational questions are submitted to plenary sessions of the board.

3. The whole organisation works as an entity based on the team principle, and has no formal divisions or units.

4. Staff in 1970

	Full-time	Part-time
Assistant superintendent	1	
Secretaries (senior personnel)	2	
Advisers (counsellors)	6	11

5. Total budget

1968	*ca.* 300,000 N.kr.
1969	*ca.* 500,000 N.kr.
1970	*ca.* 730,000 N.kr.

Predominant source of finance: the municipality of Oslo.

6. Teacher training: The organisation runs courses to inform and train teachers who will take part in research and development projects. The organisation also participates to a certain degree in courses arranged by the local teachers' centre where results of experimentation and of research projects are disseminated to the administrators and teachers.

7. No participation in the training of educational research workers.

8. The organisation is concentrating upon projects that are - or will be - of practical value to decision-makers, administrators, practising teachers and parents in the development of the schools.

Some survey studies have been launched. Most activities have been concerned with projects dealing with instruction methods and the introduction of new curriculum contents.

The research methods and designs have varied considerably, from strict scientific designs and data processing to tabulating raw data and percentages.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

C.1 *Språklaboratorieforsøk* (Language laboratory project)

Responsible researcher: O. VORMELAND

1965-68

C.2 *5-dagers skoleuke* (5-day school week)

Responsible researcher: O. VORMELAND

1965-69

C.3 *Estetiske fag i gymnaset* (Fine arts - music, art and literature - in the upper secondary school)

Responsible researcher: O. VORMELAND

1963-69

C.4 *Skriftprosjektøren i undervisningen* (The overhead projector in teaching)

Responsible researcher: O. VORMELAND

1966-69

C.5 *Lekselesing på skolen* (Homework at school)

Responsible researcher: O. VORMELAND

1966-68

C.6 *Førskoleklasser, forsøk i Oslo* (Pre-school classes in Oslo)

Responsible researcher: G. HAGESAETHER

1965-70

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *Sammenholdte klasser* (Comprehensive (heterogeneous) classes)

Responsible researcher: Ø. ENGELAND

Starting date: Autumn 1970

Probable completion date: 1974-75

Purpose: The objective of this experiment is to clarify some of the effects comprehensive classes have on the pupils, the teachers and the school administration.

Procedure: The experiment includes about 20 classes at a large school, at the 8th and 9th grade level, and all pupils in the four streamed subjects: Norwegian, English, mathematics and German. (The pupils choose in the 7th grade their stream or level in these four subjects, each pupil having two or three streams to choose from; approximately 85% of pupils in Oslo chose the highest stream for one or more subjects.)

When the Curriculum Committee (*Normalplanutvalget*) of 1967, in their preparatory work for the new curriculum guide, recommended comprehensive classes as a possible replacement for the streaming system, the Oslo school board, in co-operation with the Department for Experimentation and Research, decided to plan instruction in the streamed subjects as comprehensive class instruction.

In all subjects a large amount of new teaching materials have been produced or adapted. It has therefore become possible to introduce more independent methods of work and more individualised instruction than has previously been the case, and so to offer the individual pupil instruction better adapted to his needs.

In the framework of the project efforts will be made to evaluate whether this form of comprehensive class instruction is feasible and what requirements must be fulfilled if it is to be implemented as the general system.

D.2 *Elevers syn på skoledemokrati* (Students' views on school democracy)

Responsible researcher: Ø. ENGELAND

Number of research workers engaged in project: 2

Starting date: Autumn 1970

Probable completion date: Autumn 1971

Purpose: To chart the views of upper secondary school pupils on various questions connected with democracy in the schools.

Procedure: The development of new forms of school democracy is in progress today at many schools all over the country. Experiments with expanded student council activities in upper secondary education and with new forms of co-operation in elementary and lower secondary education indicate great activity in this sector.

Data will be collected during the spring of 1971 (by questionnaire). A sample of about 800 upper secondary school pupils from Oslo have been picked out, and these are assumed to be representative of the city's corresponding school population.

D.3 *Trivsel og tilpasning i ungdomsskolen* (Well-being and adjustment in the comprehensive school)

Responsible researcher: T.E. HAUGE

Number of research workers engaged in project: 2 - 3

Starting date: Autumn 1969

Probable completion date: 1971

Purpose: The main task of the project is to study those factors that affect the well-being and adjustment of the pupils at school. It is hoped that a picture will emerge of the difficulties some pupils have in their school environment and, if possible, to find out the reasons for them.

Procedure: The project is the first part of a planned larger study on a follow-up basis, which will continue throughout 1971. This first part is a cross-section study, in which approximately a quarter of the pupils in the 7th, 8th and 9th grades in Oslo, about 4,000 pupils, are included. By using a questionnaire information has been obtained on the pupils' motivation for schooling, their well-being at school, their burden of work, anxiety and uncertainty, social relationships, attitudes to subjects and the school, and satisfaction with existing forms of instruction. Information on their performances, absences from school, social-economic status, etc, has also been collected.

D.4 *Ulike former for hjelpeundervisning vurdert av mødre/elever/laerere* (Various types of remedial instruction evaluation by mothers/pupils/teachers)

Responsible researcher: F. EGELAND

Number of research workers engaged in project: 2 - 3

Starting date: Spring 1969

Probable completion date: 1972-73.

Purpose: The Norwegian school system makes use of at least nine types of remedial instruction. The project aims at investigating the following methods: schools for mentally retarded (IQ 75-90), remedial classes, remedial groups (in which the pupils receive remedial instruction in their main subjects while otherwise attending an ordinary class), supplementary instruction, help within the framework of the classroom.

Procedure: Mothers, pupils and teachers have been asked by questionnaire to make their personal evaluation of which of the five types they consider to be the most beneficial and which the least satisfactory. The study has involved persons connected with these various types of instruction, but it has also been planned in such a way that children at various levels of intelligence and subject competence are also represented. An effort is being made to find the answer to the following questions, among others: What type of remedial instruction represents the highest satisfaction/dissatisfaction ratio? Is there general agreement/disagreement in the positive and negative evaluations of one or more of the types? Will integration create special problems of tolerance in comparison with isolation?

About 1,400 children from the third and sixth grades, 1,400 mothers and 600 teachers are involved in the study. The study is representative of all the children in Oslo at the stated grade levels.

The material obtained from the replies to the questionnaire will be related to the pupils' performances in subject and intelligence tests, their socio-economic conditions and to sociometric and similar factors.

D.5 *Skoleklinikker* (School clinics)

Responsible researcher: L. VEDELER

Number of research workers engaged in project: 3

Starting date: 1968

Probable completion date: 1971

Purpose: The project aims at arriving at a flexible and effective form of direct and indirect aid to pupils who need help beyond what the classroom teacher can give within the framework of the class.

Procedure: The project includes six schools in Oslo. For the time being it is limited to grades 1-3. During 1970-71 material was collected from three schools with school clinics and three control schools. The material includes information on the pupils who received instruction at the school clinics/supplementary instruction, as well as on all other pupils in their classes.

At the experimental schools the school clinics replace the system of supplementary instruction. The leader of the clinic receives special training (for instance, a one year course at the training college for Special teachers) and practice with working with children at the same grade level. Rooms are available that are specially equipped for the purpose, and the clinic teachers have at their disposal material adapted for instruction in groups and individually. The material is used both at the clinic and in the classroom.

The school clinics are intentionally engaged in prophylactic work, and the 1st grade level is given much greater attention than is usual. As a part of this work the pupils' first weeks at school are used as a period of adjustment to the school. During this period subject instruction is replaced by school-preparatory activities.

D.6 *Førskoleklasser. Metodeforsøk* (Pre-school classes - teaching methods experiment)

Responsible researcher: G. HAGESAETHER

Number of research workers engaged in project: 2

Starting date: 1969

Probable completion date: 1973

Purpose: To elaborate a teaching methods plan for the school-preparatory activities of the pre-school system, and to measure its effect.

Procedure: The municipality of Oslo has a total of fourteen experimental pre-school classes in the school year 1970-71. Four of these classes were chosen to participate in the project.

Pre-school class children in Oslo are chosen at random from among those for whom an application has been received. However, before the distribution of available pre-school places was made, all of the applicants from the two school districts in question were subjected to school psychological tests. The groups were then made up in such a way that the groups of pre-school pupils were similar in intellectual maturity, sex and age to those children for whom there was no place in a pre-school class.

The pre-school classes follow the framework plan that has been drawn up in connection with the pre-school experiments in Oslo. A teaching methods plan is being used in the schools involved in the project that is more detailed as far as the school preparatory activities are concerned, than the one usually used in other pre-school classes. The plan still allows the individual pre-school teacher great freedom and there is no curriculum requirement involved.

When the children enter the 1st grade, and at later stages of their school career, a comparison will be made between those pupils who have attended pre-school classes and those who applied but who were not admitted. It is hoped that a more precisely defined measurement of the effect of attending a pre-school class will be obtained in this way than has previously been possible.

The project is part of a co-operative project drawn up by OECD/CERI in which research teams from Sweden, the Netherlands and Great Britain are also participating.

D.7 *Bokstavtyper i den første morsmålsopplaeringen* (Type of letters used in elementary teaching of mother tongue)

Responsible researcher: G. HAGESAETHER

Number of research workers engaged in project: 2

Starting date: 1969

Probable completion date: 1973

Purpose: To clarify what importance the choice of letter-type has for the child's skill in reading and spelling.

Procedure: The project includes more than 40 first grades in Oslo and started at the beginning of the school year 1969-70.

Two primary readers (ABCs) were used as experimental texts. One of them presents only printed capital letters in its first part, the other only printed lower case letters. By agreement with the authors and the publishers these books were both produced in parallel editions for this experiment. The parallel editions are like the regular editions, except that the type of letters used in the first parts have been exchanged: the book that originally began with capital letters uses lower case in the parallel edition, and the original edition that began with lower case presents, in its parallel edition, capitals first.

The books have been distributed among the classes according to the following plan:

Group	A	B	C	D
Book	I	I	II	II
Edition	Regular	Parallel	Regular	Parallel
Type of letter	CAPITALS	lower case	lower case	CAPITALS

At the beginning of the first grade data were collected on the children's previous knowledge, their intellectual maturity, etc. The pupils were followed up at a later date in the first grade with performance tests. Similar tests will also be given during their second year at school.

Name of organisation: NORGES ALMENVITENSKAPELIGE FORSKNINGSRÅD, UTREDNINGSINSTITUTT (Norwegian Research Council for Science and the Humanities, Institute for Studies in Higher Education and Research)

Address: Akersgaten 49, Oslo 1

Director: Sigmund Vangsnes, cand.oecon.

A. HISTORICAL

Year of foundation: 1954.

The Research Department was established by the Board of Directors of the Research Council. Its foundation led from the need for statistical surveys of higher education and for surveys of the demand for research workers and other qualified personnel.

B. ORGANISATION AND PROGRAMME

1. The Institute is affiliated to the Research Council and has a permanent staff of investigators and assistants.

2. The Research Department has its own Board of Management. The Board submits proposals for grants to the Directors of the Council. Within the framework of powers granted by the Council, the Board of Management decides on fields to be surveyed and on appointments and budgets, accepts commissions and decides on the priorities of current engagements.

3. There are two sections, one for studies on higher education and academically qualified manpower, and another for surveys of research activities.

4. No participation in the training of teachers.

5. Staff in 1970

	Full-time	Part-time
Total	18	4
Researchers	10	1

6. Budget

1968	930,000 N.kr.
1969	1,040,000 N.kr.
1970	1,325,000 N.kr.

Mainly grants from the Norwegian Research Council for Science and the Humanities.

7. Main fields of activity:

The institute conducts studies on the selection of entrants to secondary education and further selection of students in higher education as well as investigations into relationships between students' performance and possible determinants.

Conditional forecasts of student enrolment in higher education, and supply and demand analyses of academically trained personnel are being carried out.

Various mathematical models of the educational system have been constructed and development work is going on continuously.

Registers have been established for academically trained personnel, research workers and research institutes, all of which are to be brought up to date annually.

The institute executes annual statistical programmes concerning expenditure and manpower in research and development. On this basis special surveys of Norwegian research are also presented, especially within the working fields of the Council. The latter include surveys of different fields of research as well as analyses of the mobility and recruitment of research personnel.

C. MAJOR RESEARCH PROJECTS REPORTED IN THE ACADEMIC YEARS 1968-69 AND 1969-70

Reports

Report No. 1/1968	*Enrolments for the upper stage in secondary schools in the school year 1967-68 related to actual age-group.*
Report No. 2/1968	*Certificated teachers graduated within the period 1905-1965.* By R. Hove.
Report No. 3/1968	*Certificated teachers with some numerical forecasts for the period 1970-85.* By R. Hove.
Report No. 4/1968	*Certificated teachers in the compulsory school system. With some numerical forecasts for the period 1975-85.* By R. Hove.
Report No. 5/1968	*Demand for dentists up to 1985. Some estimates.* By E. Bonnevie Seip.
Report No. 6/1968	*University graduates in some social sciences. Distribution in occupation and industry.* By R. Edvardsen.
Report No. 7/1968	*Norwegian students and graduates in universities at home and abroad in 1967.* By T. Holter.
Report No. 1/1969	*Factors affecting the choice of study in universities. Follow-up studies of those who graduated from the Norwegian* gymnas *in 1963.* By A-L. Østby.
Report No. 2/1969	*New entrants to the Norwegian* gymnas, *1968-69.* By T. Holter.
Report Nos.3/1969 1/1970	*Norwegian students at institutions of higher education in Norway and abroad.* By T. Holter.
Report No. 2/1970	*Physicians' working hours in Norway.* By S. Olsen.
Report No. 3/1970	*The research fellow - career pattern and working conditions.* By H. Skoie and M. Scobie.
	The dismal life and times of the research fellow. By U. Torgersen.
Report No. 4/1970	Gymnas *entrants and* gymnas *graduates.* By T. Holter.

Survey

A survey of man-years of research and total expenditure in research institutions in 1966. Report edited and published in 1968 in co-operation with the Agricultural Research Council of Norway and The Royal Norwegian Council for Scientific and Industrial Research.

Note: The character and purpose of the projects are given by the titles of the reports. Each report contains a short description of methods and conclusions of the project.

Survey results are submitted to relevant authorities, institutions and persons. Several of the reports indicate implicitly measures which ought to be taken by the authorities to re-establish an appropriate balance of supply and demand for various categories of qualified manpower.

D. MAJOR RESEARCH PROJECTS IN PROGRESS

D.1 *A study on future supply of and demand for lawyers and graduates in Social Sciences.*

D.2 *A series of conditional forecasts of student enrolment and graduation in the University sector, stock of academically trained personnel and needs for resources in higher education.*

D.3 *A survey of the state of fundamental biological research in Norway.*

D.4 *An analysis on the mobility of the scientific personnel at the institutions of higher education in the years 1961 to 1969.*

D.5 *Studies on recruitment of research personnel within different disciplines of research.*

D.6 *Annual statistical programme on manpower and expenditure in research and development.*

This project is of a permanent character and the main features of the findings are published in co-operation with the two other Norwegian research councils. The programme for 1971 includes a detailed survey of the working hours of the scientific staff at the University of Oslo.

D.7 *Follow-up study of secondary school graduates*

For four complete groups of secondary school graduates a follow-up study of the choice of further education and occupation is being undertaken. The pupils will also be classified according to social and geographical origin and according to results of school-examinations.

D.8 *Fonemisk analyse i leseundervisningen* (Phonemic analysis in the teaching of reading)

Responsible researcher: V. **SKJELFJORD**

Starting date: August 1970

Probable completion date: 1975

Purpose: To explore the process of learning phonemes. To explore the relation between knowledge of the phonemic composition of words and skill in reading aloud.

Procedure: Experimental teaching of phonemic analysis. Individual testing of skill in phonemic analysis of words and skill in reading aloud.

III. EDUCATIONAL RESEARCH PROJECTS CARRIED OUT BY ORGANISATIONS NOT PRIMARILY CONCERNED WITH EDUCATIONAL RESEARCH

Name of organisation: INSTITUTT FOR ANVENDT SOSIALVITENSKAPELIG FORSKNING
(Institute of Applied Social Research)

Address: Blindern, Postboks 1100, Oslo 3

Director: Dr. Natalie Rogoff Ramsøy

A. HISTORICAL

The Institute was founded in 1966, when the first Board of Directors was appointed. It began operation in January 1968, when the Director assumed her duties.

The initiative was taken by a government-appointed committee of social scientists and civil servants who reported to the Norwegian Parliament on the need for and feasibility of establishing such an institute.

The purpose of the Institute is to conduct studies which serve the administrative, policy-making, and planning functions of Government Ministries and other public bodies. Its mandate is, therefore, broader than that of educational research institutes, but studies of the educational system are included and, indeed, do represent one of the major activities of the Institute.

B. ORGANISATION AND PROGRAMME

1. The Institute is independent of other organisations, as far as its policies and programmes are concerned. However, it is supported by a basic yearly grant from the central Government, and this part of its budget is administered by the Scientific Office of the Ministry of Education. The connection with the University of Oslo is in fact close (the Institute being housed in the social science building of the University) but informal.

2. The Board of Directors sets policy, approves the budget, and handles personnel matters. At the present time it consists of representatives of the social science community in Norway.

3. The Institute is not divided into sections, but it does have diverse research programmes, including one for educational research.

MAJOR RESEARCH PROJECTS

1. *The development of compulsory youth schools in Norway*

A study of the way in which Norway's municipalities have implemented the change-over from a 7-year to a 9-year compulsory school system: When the local school boards started to plan the change-over, how quickly did they put their plans into effect? What kinds of teachers have theyrecruited? How many of the curricular options did they offer? How are their pupils distributed among the various course offerings, etc? Analysis of the change-over in relation to various social, economic and demographic characteristics of the municipalities, such as their size, location, urbanisation, occupational structure, and income level.

2. *The effect of youth schools on the structure and mobility of the population in local areas*

An intensive study of some 20 municipalities of varying location. Longitudinal studies of a number of age cohorts, including the last to attend the old 7-year schools and the first to attend the new 9-year schools, carried out by following up all of the individuals in these age cohorts (some 15,000 persons) long enough to ascertain whether or not they take the baccalaureate examination (*examen artium*).

3. *Educational level, intelligence, and occupational mobility of young Norwegian males*

An analysis of data collected in 1968 in the course of screening interviews of all 19-year old males when called up for compulsory military service. Essentially a repeat study of a similar analysis carried out in earlier years, the point being to examine trends in participation in post-compulsory schooling. Since data on intelligence are available, the analysis focuses on the extent to which the general increase in educational level has been associated with a more effective mobilisation of talent in Norwegian society.

4. *Distance from nearest secondary school and its effect on school enrolment*

The project is based on an analysis of applications to academic, vocational, and commercial secondary schools throughout Norway for the school year 1963. Applicants were classified according to place of residence, and distance from the nearest secondary school was computed. With the help of these data, the study will provide estimates of the effect of distance on school enrolment.

5. *The school and local culture*

Based on lengthy periods of participant observation by a social anthropologist, this project attempts to develop insights into the different sets of social relations in a small Norwegian township - pupils and teachers, children and their families, the value premises of schools, youth, and the local culture.

6. *Reform of the* gymnasium *as viewed by its teachers*

A postal questionnaire was sent to a sample of Norway's *gymnasium* (academic secondary school) teachers in order to investigate their attitudes toward a series of proposed reforms of the schools where they work. The purpose is to assess whether or not this key professional group is on the whole positive or negative toward changes in both the curriculum and the organisational structure of the *gymnasium*, and to analyse how attitudes toward such changes combine with other aspects of the teachers' professional attitudes and values.